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ORIGINAL ARTICLES.

PULMONARY AND LARYNGEAL TUBERCULOSIS TREATED WITH ANTIPHTHISIC SERUM T. R., WITH REMARKS ON THE ETIOLOGY OF TUBERCULOSIS.

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In a former paper I have said, with reference to the influence of post-nasal catarrh on the production of pulmonary tuberculosis: "According to our present experience, there is no doubt that infection with tuberculosis most frequently takes place through the respiratory organs. But I agree with Ponfick, with whom, by the way, Ziem also coincides, when he declares that the lungs can no longer be looked upon as the principal organs for the entrance of the tuberculous poison. To me it was always incomprehensible how the tubercle bacillus, during respiration, should penetrate the many tortuous respiratory passages, to finally build its nest at the apices of the lungs, which are so difficult to reach. Why do not other microscopic particles, inhaled in the air, do the same? Why does not soot, for example, not only enter the nose but also all parts of the lungs? If we suppose that tubercle bacilli are drawn away mechanically by the air current, I will not admit that, when inhaled in moderate quantities, they reach the apices of the lungs without their progress being previously checked. Imagine, for the sake of simplicity, the air current passing in a straight direction toward the retropharyngeal cavity. Here it turns at an acute angle, and it would be more than peculiar if the bacteria would not be held there by the moist mucosa. In addition, deeper down the air current is deviated at the entrance into the larynx by the various prominences, such as the epiglottis, arytenoids, etc., and again, and more especially, at the bifurcation of the trachea."

There is still another factor that makes the retropharynx the *locus minima resistentia*. The different kinds of bacteria, especially the cocci, according to the experiments of Babes, are prone to prepare the soil for the tubercle bacilli. Thus this factor also facilitates the entrance of the tubercle bacillus into the mucosa of these parts. Once having penetrated the lymph-tissue it wanders with the lymph-stream until it gets into the larger lymph-vessels, and finally into

the thoracic duct. On its way thither the bacillus is quite frequently hindered or detained by stoppage of the vasa afferentia, etc., and the latent tuberculosis, so commonly met with, originates. On the other hand, the thoracic duct becomes the main source for the further spreading of the germs. From here the infection of the apices of the lungs, the *loci minoris resistentia*, proceeds.¹ It is evident that the organism frequently reacts against the invasion of the tubercle bacillus, and the glandular swellings, so common in children, appear. These lymphomata, often nothing else than a consequence of an existing retropharyngeal affection, bear the same relation to this condition as the inguinal bubo does to the primary affection in the genitals.

After bringing many more proofs in confirmation of my theory I came to the conclusion that the hypertrophy of the lymphoid tissue at the vault of the pharynx is nothing more than the expression of this reactionary inflammation. At that time I had overlooked an article by Professor Trautmann of Berlin, in which he says: "Although by careful examination of the hyperplastic tissue at the vault of the pharynx, of the follicles, and of the secretion, neither giant cells nor tubercle bacilli were found, I nevertheless consider tuberculosis the cause of the hyperplasia."

A communication made to me verbally by Robert Koch also speaks in favor of tuberculosis being the cause of the hypertrophy. After injection of tuberculin he found at first a rise of temperature, then more swelling and hyperplasia of the lymphoid tissue, and after further injections both disappeared and the hyperplasia was cured, but not until treatment extended over several months."

I cannot mention here all the facts that have been elicited in favor of my theory; I will only say that Pluder and Fischer,² in an article that appeared almost on the same day as mine, came to very similar conclusions. They believe that the five cases which they mention must be considered as latent and *primary* tuberculosis. They explain their ideas about the propagation of the tuberculous virus in the system in a very interesting manner, for details of which I would refer the reader to the original paper. I have examined numerous patients and have found

¹ W. Freudenthal: "Kleinere Beiträge zur Aetiologie der Lungen-tuberkulose," *Arch. für Laryngol.*, Bd. 5, 1896, and *Annals of Otology*, February, 1897.

² F. Pluder und W. Fischer: "Ueber primäre latente Tuberkulose," etc., *Archiv für Laryngologie*, Bd. IV, page 372.

that a great many have affections of the retropharynx, and that of these a certain percentage show tuberculous lesions in the lungs. I did not draw any definite conclusions in regard to the percentage of cases of phthisis among those affected with nasal and post-nasal disease but attempted to show that a direct connection exists between affections of the retropharynx or nose and general tuberculosis; in other words, that the disease commonly called "catarrh" frequently leads to tuberculosis.

Dr. E. Fletcher Ingals of Chicago has asserted that "catarrh" has a tendency to prevent tuberculosis.¹ He says that "38 per cent. of the human family at one time or another suffer from pulmonary tuberculosis, as against about 75 per cent. with diseases of the upper air passages, or nasal catarrh." This is as much as, or even more, than I expected, but he says further, that of these 38 per cent. with tuberculosis comparatively few suffer from nasal disease. Thus, for example, of his 830 cases of pulmonary tuberculosis, only 237, or about 28 per cent., showed some nasal trouble. "Of the 237 cases which make up this 28 per cent. I find that 168 consisted of exostosis and deflection of the septum, which . . . is present in 50 per cent. of all persons of the European race; *therefore many of these would have had no possible influence* in causing the pulmonary tuberculosis." I fail to see the logic of Dr. Ingals' conclusions. Because 50 per cent. of all Europeans have deflections of the septum, must we exclude them from our statistics? Are deflections of the nasal septum to be considered normal because so many civilized people have acquired them? We might as well say that gonorrhea in man is a normal condition because so many cases exist. Deflection of the nasal septum is a pathologic condition which also tends to produce post-nasal catarrh and I consider it a very important etiologic factor in favor of our theory. But Dr. Ingals goes on to exclude other possibilities by saying: "Further, my records show that of all the cases of pulmonary tuberculosis, 1272 in number, only 27 of the patients, or about 2 per cent., complained of having had any previous nasal disease, which is 4 per cent. less than the normal average." His position must be very weak if he is forced to fall back on such arguments. Were we to be guided by the complaints of the patient, we would, for instance, still have to treat many cases of persistent headache as malaria and fill the patient with quinin and similar drugs, as we formerly did. We would never be justified in removing polypi, etc., in cases of asthma because the patient does not complain of his nose.

About thirteen years ago, while pursuing other investigations, I examined the nasal passages of every patient, 500 altogether, that came to the Hospital for the Ruptured and Crippled, this city, and was surprised to notice how seldom the patients complained of their noses. I remember several instances in which grown persons could not breathe through their noses at all, since they were almost hermetically stopped up by numerous polypi, etc., and nevertheless they had no complaints to make. In regard to tuberculous patients, I examined 75 of the consumptives at the Montefiore Home. Of these 37 did not complain at all about the throat or nose, and 38 did, *i.e.*, about half on each side. Of the 37 patients who did not complain, not less than 23 showed marked abnormalities in their nasal passages and in only 14 were there no marked changes at all. Although these statistics are not extensive, I am sure that they will convincingly prove that consumptives suffer from nose and throat troubles, not only as much so, but more than other people. Two-thirds of those who did not complain had some kind of affection of the throat or nose, and naturally the others, who did complain, showed lesions of the parts also.

The question of the treatment of tuberculosis with the new tuberculin T. R. has been a burning one since Koch published the result of his experiments with the agent nearly three years ago. It was during the course of certain experiments which I was making with tuberculin T. R. that I came across three publications from Professor v. Leyden's clinic, which almost made me give up my investigations. On looking over these papers, however, they did not seem to me to be altogether exempt from criticism. The first paper was that by Dr. Huber, assistant to v. Leyden, who made experiments with the new tuberculin T. R. on animals, and arrived at the conclusion that it had no therapeutic value. His deductions were contradicted by Professor Brieger, Dr. Petruschky, and others. Still, we must admit that his conclusions were correct in one point, *vis.*, that in one or two of his experiments virulent tubercle bacilli were present in the new tuberculin. But since September, 1897, this defect has been remedied. Nor were his practical experiments on patients more successful. In five advanced cases there was no influence visible. In two cases that were doubtful the status of the patients remained unchanged. In three cases, which were suitable for this treatment, in which, however, the injections were interrupted prematurely, one patient was somewhat improved, while the others remained unchanged. In four cases in which the treatment was specially indicated, the

¹ *Annals of Otolaryngology and Rhinology*, p. 173, February, 1898.

condition of one patient remained unchanged, the second was almost cured, but only temporarily, as he afterward developed miliary tuberculosis, and the other two were materially improved. Similar results were obtained by Dr. Burghart in the female wards of v. Leyden's clinic. In the same number of the *Berliner klinische Wochenschrift* (p. 146, 1898) Dr. Alb. Raude reports three cases of pulmonary tuberculosis treated with T. R. One patient got worse and died, while the two others improved markedly; one gained six pounds and the other twenty pounds in weight.

In the Berlin "Gesellschaft der Charité-Aerzte" on February 10, 1898, there was a heated debate on this topic. This society was apparently divided into two parties; on the one side was the Institution for Infectious Diseases (Koch, Brieger, Marx), and on the other side were the clinicians. As the result of this discussion it might be said in the words of the president, Dr. Schaper, that one point seems to be evident, *viz.*: that it is effective only in the relatively pure cases of bacillary tuberculosis, not in so-called mixed infections.

Last July, in St. Louis, I had the opportunity to see Dr. Carl Fisch's experiments. He was immunizing horses with this new tuberculin T. R., and he was fairly confident of producing in this way a serum that would contain more antitoxic properties than former serums. All of his experiments were published in the *Journal of the American Medical Association* for October 30, 1897, and, as they seemed to me not only scientific but rational, I gave this antiphthisic serum a trial. I commenced using the injections at the Montefiore Home for Chronic Invalids on February 24, and stopped April 8, 1898. With but few interruptions the four patients received daily injections of $\frac{1}{2}$ c.c. I increased the dose rapidly to 1 c.c., but had to reduce it again in the case of three patients on account of the severe reaction. Only one patient could stand 1 c.c., and that only for a comparatively short time. This patient received injections of the old tuberculin seven years ago in the German Hospital, and he could stand these new injections much better than any of the other three patients. The histories are as follows:

CASE I.—Marcus G., aged forty-one years; occupation, furrier; nativity, Hungary; married. Family history negative. Previous history: Sick since April 1, 1895. Began as inflammation of lungs; four months in bed. August, 1896, hemorrhage; no night-sweats; loss of flesh. At present he coughs much, expectoration is profuse and yellow; no night-sweats; no loss of weight; bowels regular; appetite poor.

Physical examination: Chest flattened; retraction over both clavicles, especially right; expansion

slight. Dulness at both apices, especially right. Medium coarse, moist râles over upper right lung. Fine moist râles right interscapular region. Moist râles all over right lung. Vocal resonance increased, right side. Few moist râles on left side anteriorly. Harsh respiration with prolonged expiration. Slight bronchophony.

Status April 8, 1898: Marked dulness over right lung, anteriorly; on left side slight supraclavicular dulness; below clavicle concussion-note normal. Swollen gland over left clavicle. Right lung, posteriorly, dulness to middle of scapula. Left lung, posteriorly, percussion-note normal. Sonorous moist râles all over left lung. Vesicular breathing anteriorly and posteriorly. Patient feels better and sleeps better; appetite better; coughs less. On March 24 1 c.c. of the serum was injected but on the next day the patient felt very poorly. His temperature rose to 101° F., and the injections, therefore, were stopped for three days. After this he received an injection regularly every day, except once when he was very weak.

Although this case did not seem to me to be one of pure bacillary infection, I must say that the serum treatment had no deleterious effect on his condition. On the contrary, the left side is freer than it was before. The right lung is unchanged, and the patient's weight remained stationary. Bacilli were present in the sputum after treatment was discontinued. As a whole, his condition was perhaps somewhat improved.

CASE II.—S. F., aged twenty-one years; occupation, furrier. Family history negative. Previous history: Always well; eight months previously began to cough and expectorate; pain in chest; hemoptysis, night-sweats, etc. Complains at present of severe cough night and morning; free expectoration, somewhat darker than pus; night-sweats; loss of flesh; appetite is good and bowels regular.

Physical examination: Chest fairly developed, but slightly retracted over clavicles; expansion diminished on both sides. Vocal fremitus slightly increased on left side. Dulness at left apex marked; slight dulness at right apex. Hard breathing over entire upper right lung, with prolonged expiration. Fine and moist râles and occasional rhonchi over the middle of the right lung anteriorly. Prolonged expiration at left apex with coarse moist râles and sonorous rhonchi. Fine and medium râles left side, at the bifurcation of the bronchi behind. Injections were commenced on February 24, 1898.

Status April 8, 1898. Dulness in left supraclavicular region marked; on right side very little dulness. Small crepitant râles, left side, anteriorly, down to third rib; right side, anteriorly, breathing normal. Slight dulness in left posterior supraclavicular region. Breathing, left lung, posteriorly, harsh, with few moist râles. The patient felt about the same as before the injections were commenced. There was an infiltration of both ventricular lips of

the larynx intra-arytenoid space. Ulceration of the left vocal lip.

This case did not run as smoothly as the first one. At the commencement of the treatment the man had laryngitis, which grew worse and later showed distinct tubercular infiltration and ulceration. After receiving 1 c.c. of serum on March 2d, his temperature rose to 102.4° F., and then to 103.3° F. From March 3d to 7th we refrained from giving the injections. On March 8th he again received ½ c.c., but on the three following days he felt so bad that we had to stop them again, a hemorrhage having occurred during the night of March 8th. The ulcerations in his larynx then developed more rapidly and were relieved by daily insufflations of orthoform. When these were omitted the pains in the larynx returned. On March 30th an attack of syncope followed the injection but he recovered promptly. I, therefore, again omitted the serum for three days. He lost 7½ pounds in weight.

CASE III.—P. V. G., occupation, electrician. Family history negative. Previous history: Was well up to 1890; then had bronchopneumonia and was in bed four months. His cough persisted and after being examined he was advised to take Koch's lymph, November, 1890. In May, 1891, he went to the Adirondacks and then to Asheville, where he gained weight up to 145 pounds. At the time of admission he coughed very little and only in the morning. Expectoration was very scanty and yellowish; local sweats on neck; appetite poor; bowels regular. Physical examination: Chest flattened, expansion diminished; vocal fremitus increased on left side. Slight dulness over both apices, especially the left, extending down to third rib. Harsh respiration, with prolonged expiration at left apex. In first, second, and third interspaces, a little internal to the mammillary line, cavernous respiration, and whispering pectoriloquy. Fine, medium-moist râles at left apex. Inspiratory râles at both apices. Fine moist râles at bifurcation of the bronchi posteriorly. Bronchial breathing in left suprascapular region. Status April 8, 1898: Dulness in left supraclavicular region, slight dulness right supraclavicular. Slight dulness left infraclavicular region. Harsh breathing left lung anteriorly. Small crepitant râles second intercostal space, right lung anterior. Dulness left lung posteriorly to middle of scapula, left lung posteriorly. Pleuritic friction-sounds also at the base of lung in left axillary line. Cough has ceased entirely; appetite poor. Feels better.

This patient could stand the injections better than any of the others, probably because he had undergone tuberculin treatment seven years before. There was little or no reaction, his temperature seldom rising above 99° F. For some time he complained of pains in the arms, shoulders, etc., which I consider was due to the injections. His appetite as a

rule, was poor, but he secretly indulged in whisky. On the left side a pleurisy set in, which I purposely did not treat at all, but otherwise the condition of his lungs was improved. His weight remained about the same and he was discharged from the Home as he wanted to commence work.

CASE IV.—L. H., aged twenty-five years; occupation, tailor. A brother had died of tuberculosis. Since May, 1897, the patient had had hemoptyses and night-sweats; had lost twenty pounds in weight. He had cough, especially in the morning, and his expectoration was scanty and white. No night-sweats; gaining in weight; appetite good, bowels regular. Both apices were retracted and expansion limited. Dulness over both apices. Tactile fremitus increased on both sides. Harsh breathing right lung anteriorly and prolonged expiration at the left apex. A few fine râles over left bronchus behind. Vocal resonance increased on both sides. Status April 12, 1898: Dulness supraclavicular region, left side; also slight dulness up to upper border of third rib. Dulness over upper portion of the left lung in the axillary line and dulness in the suprascapular region posteriorly. Dulness in the supraclavicular region, right side. Less marked dulness infraclavicular region down to second interspace. Slightly diminished breathing over entire anterior aspect of left lung, accompanied by numerous moist and crepitant râles. Diminished breathing left side posteriorly with many moist râles in the suprascapular and interscapular region. Breathing diminished over entire right lung. A few crepitant râles over upper lobe. Patient's weight, 107½ pounds.

This patient could not bear the serum, and although at times I had hopes that he would become accustomed to it he again and again showed marked reaction, lost in flesh constantly (altogether 10½ pounds) and finally grew worse under the treatment. Urticaria at one time was very marked.

Although these results are not so gratifying as those obtained by Dr. Carl Fisch or by Dr. A. M. Holmes of Denver, nor as unfavorable as those of Dr. F. E. Waxham of Denver, I must say that I am of the opinion that this new serum is a remedy which should be tried much more extensively. When we have a series of hundreds of cases, carefully watched and recorded, we will be better able to pass judgment on its value. Until then all well-observed cases will help to form an opinion, and in furtherance of this object this report is published.

A Good Showing for Columbia.—Graduates of forty-three different medical schools have tried the State examinations in Minnesota during the past ten years. The College of Physicians and Surgeons of this city has the best record of all since no one of her graduates who took the examinations failed to pass at the first trial.

THE RELATION OF THE STATE TO THE CONSUMPTIVE, WITH SPECIAL REFERENCE TO PREVENTION OF THE DISEASE AND STATE CARE OF THE INCIPIENT CONSUMPTIVE.¹

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In a paper read before this society last year I presented briefly some arguments in favor of more thorough prevention from tuberculosis and the necessity for special hospitals near home for advanced cases.

The establishment of a State hospital for incipient consumptives in the Adirondack Mountains on land owned by the State was strongly urged, and State care of these cases advocated. Since that time a resolution authorizing the appointment of a committee of three senators to investigate and report upon the advisability of establishing a State hospital for incipient consumptives in the Adirondacks passed the State Senate, and \$500 was appropriated to defray the expense of such investigation. By the adoption of this resolution the State of New York recognized for the first time the importance of considering the matter of tuberculosis in the human being. The Senate Committee has reported strongly in favor of the plan and the results of its investigations are exhaustive and valuable. During the present session of the Legislature a bill has been introduced in the Senate and Assembly, entitled "An Act to establish a State hospital in the forest preserves of the Adirondack Mountains for the treatment of incipient tuberculosis and making an appropriation therefor." A resolution has also been introduced authorizing the State board to publish and distribute literature relative to the infection of tuberculosis and the proper method of prevention.

In view of these facts a brief consideration of the relation of the consumptive to the State is peculiarly appropriate at this time. About 14,000 die from consumption in this State each year. This is equivalent to the depopulation of a small city annually. The death-rate is higher than that of all other infectious diseases combined. About eleven per cent. of all deaths are due to this one disease and approximately one of every five more than twenty-one years of age suffers from it. Accurate, honest reports would increase the figures given. At the lowest estimate there are more than 50,000 consumptives in this State and it is probable that a number as large as our standing army is marching steadily, constantly to the grave. Of the 5,000,000 people now living in New York State about 600,000 will probably die of consumption.

¹ Read at the Ninety-third Annual Meeting of the Medical Society of the State of New York, held at Albany, January 31 and February 1 and 2, 1899.

Of all the causes of suffering, distress, and destitution consumption stands at the head. The public has become accustomed to its slow ravages and results, and the "white scourge" has been accepted as an old and necessary evil. From a humane and economic standpoint the effect is appalling and seems to be everlasting. The physician who is familiar with the woes and hardships of the consumptive is inclined to ask: Is this widespread suffering and enormous loss necessary and tolerable when opposed to all modern ideas and advanced knowledge? Ignorance may make neglect excusable, but knowledge reveals more and more the shameful course of dealing with tuberculosis in an antiquated, obsolete, unscientific manner. The medical profession knows that tuberculosis is infectious, largely preventable and curable at an early stage in a large percentage of cases. How much has this recent advance in our knowledge of the disease benefited the public and the consumptive? The public is not properly protected and the victim's distress is increased because he is shunned and finds it harder to obtain employment. The fortunate avoid the unfortunate and weakly attempt, through selfish interest to force the consumptive into isolation. Education is accomplishing something and boards of health, by the employment of partial measures, prevent, to a certain extent, the spread of the disease.

The number of deaths in this State remains almost stationary in spite of the increase of population. This may be due to special effort but there is room for doubt. It will be found that the general death-rate has decreased as sanitary conditions have improved, but tuberculosis has not diminished relatively with other infectious diseases. Certainly the prevalence of tuberculosis at the present time demonstrates the inadequacy of the methods of prevention employed or a lack of thoroughness in execution. The slight attempts at prevention have naturally failed because they were too limited in scope and have been feebly supported, evaded, or opposed by the medical profession.

The public should demand the same immunity from tuberculosis as it receives from other infectious diseases. Emotional objections in favor of concealment, fatal delay, and selfish interests should be swept aside.

The greatest known menace to public health holds its awful sway unchecked simply because well-known and efficient methods are not employed to combat it. The blame rests upon the medical profession. As the guardians of the health of the State united advocacy would insure radical action and incalculable benefits. If necessary requests and ordinance should give way to law and compulsory enforcement. The

sentimental plea that thorough measures of prevention would prove harsh and add hardship to affliction has cost the State thousands of valuable lives by misleading and deceiving the community. To secure systematic, thorough, and continuous effort the power should emanate from the State.

The State Board of Health can, through legislative enactment, adopt and enforce measures which will prevent; to take the place of local subterfuges which promise little except delusion. Or the matter can be left to a commission to investigate and report upon a consistent plan designed to be obeyed and not evaded. About a century before the cause and nature of tuberculosis were known attempts at prevention in Italy were more determined and more successful than in this day of advanced knowledge and enlightened civilization.

Everywhere a crusade against consumption is winning hearty support, and scientific methods of dealing with the problem will appeal to intelligent beings.

Why should New York State lag behind, and neglect and apathy continue? The time has arrived to listen to the advanced thought and rational appeals of those who have long urged common-sense relief for a vast evil. Isolation is in most instances practically impossible, now, but proper precautions may make it unnecessary. Segregation should be employed among the poor, and special hospitals near large centers of population will furnish the best means for caring for the advanced cases. Better treatment and segregation are thus combined. Registration of cases—instructions to the patient or relatives—inspection of food-supplies, destruction of expectoration, prohibition of promiscuous spitting, and particularly disinfection should be rigidly enforced. Why Boards of Health should be denied information concerning this one infectious disease, and efforts to eradicate should be frustrated may some day be answered. Then the reason may be discussed along with other obsolete ideas, such as the exaggerated importance of heredity and the long list of discarded remedies.

The means of prevention already mentioned and often advised will be incomplete unless combined with or preceded by one of the most important and promising. I refer to the State care of the incipient consumptive. The plan will secure complete isolation before the consumptive becomes a source of much danger and offspring practically made impossible. The patient can be removed from the public before he distributes material sufficient to infect many others. Furthermore, he is offered the only opportunity to recover or receive treatment which promises anything. Ideal isolation can be thus obtained.

The most sanguine expectations based upon efficient modes of prevention can only be realized in the course of time, and meanwhile any interest in the welfare of the consumptive will lead to the inquiry, as to what is done, and what can be done in the way of relief and cure. At present the manner of treatment and assistance received by the consumptive is stupid, inhuman, and unscientific. It can only be compared to the management of the insane in medieval times.

He struggles wretchedly along, as a rule, under palliative, or experimental treatment; tries the last new thing or latest device of quackery; spreads the disease and is shunned by his fellows until work is unobtainable or impossible, and then waits for death in his home or a hospital, where he may infect others or acquire mixed infection himself. He belongs to the only class of afflicted for whom no intelligent provision has been made. The conditions and the circumstances surrounding his distress make him the unique pathetic victim of an anomaly in our system of charities. Every other sufferer is given desired treatment, and a chance to regain health if possible. His only hope lies in a prolonged stay in a favorable climate, and that can only be procured by the well-to-do. Thousands die simply because they are poor and cannot obtain help at the proper time. Useless aid and pauperization is offered when too late. The consumptive should be cared for until he is well, not until he is dead.

We are working at the wrong end of the problem. The idea that consumption is necessarily fatal must be combatted and there can be no good reason why the consumptive alone should be denied any chance to fight for his life. As a rule they are industrious workers and belong to the intelligent class. The distinguished pioneer, Dr. E. L. Trudeau, and many others have shown that fifty per cent. of consumptives recover under suitable sanatorium treatment, and that in a large percentage of cases the condition is improved and life prolonged.

Clinical results furnish the best tests of any climate and the percentage of recoveries depends largely upon the selection of cases. Fortunately the State owns a large tract of land in the Adirondack Mountains, where excellent results have been obtained. What objection can there be to caring for consumptives in the right place instead of the wrong place? One offers nothing, the other much, and the cost is practically the same. Vast sums of money are now expended by individuals, the county, and the city upon the poor consumptive, when it is too late—the same amount could be shifted to a wise purpose.

There are many reasons why the State should as-

sume the care of the incipient consumptive and the objections to such action are easily answered. The proper location for institutions to care for the early consumptive cannot be found in this State except in certain regions more or less removed from the center of population. The crusade against tuberculosis and the treatment of curable cases can only be undertaken by the State because of expense and the necessity for avoiding multiplicity of institutions and the consequent increase of officers and salaries. A well-defined and consistent plan can be followed, appropriations controlled, and advanced scientific treatment and investigation promoted.

The State was forced to assume the care of the insane, feeble-minded, and epileptic, first as a protection to the public from physical violence, and finally to secure more humane and scientific treatment. The new proposition of State aid for the sick is supported by the facts springing from a unique modern social evil. The consumptive requires special treatment in a locality known to be beneficial. No other treatment promises anything. No other class of victims of disease needs this help which only the State can provide.

Isolation is obtained by humanitarian means. One of the most important benefits procurable by State care is education of the individual and the masses. The expense of State care will hurry determined efforts at prevention and the folly of neglecting to attack the cause will appear when the cost of its effects are made plain. Provision for relief will lead to an early diagnosis. This would become of vital importance. It is now receiving slight attention. Under the provision of the bill now before the Legislature every applicant for admission must obtain a certificate from experts appointed as examiners; otherwise any sanatorium will become a home for alleged early consumptives with mixed infection, toxemia, and marked destruction of lung tissue. The dangers of reinfection in institutional life can be obviated by strict precautions for the statistics of Falkenstein, Göbersdorf, and other places furnish complete proof that sanatoriums for consumptives, instead of increasing the disease in neighboring districts, tend to diminish the death-rate to a remarkable degree by education. Investigation seems to show that the cottage or pavilion plan is the most advantageous from every standpoint.

The absence from home and the duration of care will be long. Sufficient time should elapse to secure recovery if possible. While under treatment the patient ceases to be self-supporting; his earnings stop, and others may be left dependent. Now he is cared for about as long when his condition is hopeless. The earning capacity soon ceases forever and the

dependents must be assisted indefinitely. In one instance assistance will restore health and earning capacity, or improvement with a probable period of employment. In the other there is prolonged, often useless suffering, continued expense or destitution.

The climate in the Adirondacks is not so widely different from other localities in this State as to preclude a safe return and stay at home after recovery. This constitutes a decided advantage in favor of certain regions in this State.

Again the tendency to recurrence is largely avoided by those who have been educated to discriminate between hygienic surroundings and vicious habits and environments which encourage disease. The skeptical may ask, Will the patients go? There has been no difficulty in that way anywhere. What the consumptive desires is a chance, and every physician of experience has grown weary of the advice to go away and get well, and the pathetic reply from clerk, bookkeeper, business, and professional man, and the wage-earner—"I can't afford it, and therefore must work and die."

The expense per patient should not exceed \$250 per year. The Massachusetts State Hospital for Consumptives, recently opened, charges \$3.50 per week for those who can afford to pay. Of the first eighty-six inmates, fifty were pay patients. An institution for consumptives in the incipient stage should be largely self-supporting. The following objections to State care have been raised: First, the expense will be enormous. Second, it is a dangerous innovation, and will lead to many demands for the relief of the sick. Third, only a small proportion can be benefited, and the ultimate good will be slight because the disease is widespread.

Two of these objections can be dismissed with brief comment. There are special reasons why the consumptive needs unusual aid. The appropriation asked for at this session of the Legislature is \$200,000 to build and equip a hospital for 200 or more patients. There must be a beginning, and it is better to save a few and demonstrate the wisdom of the project than do nothing because more cannot be accomplished. The future expenditure will depend upon the wisdom of the Legislature whether the proposed expenditure is justifiable and opens the way for a new and extravagant use of the State money; this can be considered from a humane and economical standpoint.

The humanitarian side of the question is all summed up in the query, "Shall something be done for the consumptive as well as for others suffering from disease in the only rational way that promises anything, or shall the old, wasteful, cruel let-alone policy prevail?"

On the economic side the presentation of a few figures and statistics supply the best argument. Any estimate of the loss to the State by illness and death must be somewhat inaccurate and only approach the approximate. The method will depend upon individual opinion concerning the theory and technic of statistics. According to the German statistics method, it costs \$1500 to rear and educate a citizen, and it is declared to be worth that to the State. If the American be worth only \$1000 to this State, and 14,000 die each year from consumption, the first loss will be \$14,000,000. The vast majority of consumptives die between the age of eighteen and forty years. Assuming that each would have fifteen years more of earning capacity, and the amount earned is only \$500 per year the figures become more startling. Now add the unnecessary expense for illness contributed by the individual and the taxpayer, the cost of aid to the dependents, and the loss by infection and degeneracy of offspring. The preventible loss is enormous—millions upon millions. Can any one doubt that the wise expenditure of only a part of this vast sum during a series of years would make consumption an uncommon disease instead of the saddest thing in the world? How could the State invest more safely, and be more sure of a big return on a purely financial basis? Whether State care will pay can be estimated on the cost and returns for a few.

The expense per patient need not exceed \$250 per year, and the average length of stay for early cases should be less than that. Carefully selected cases should yield sixty per cent. of recoveries, and an unknown number should be sufficiently improved and the disease checked long enough to permit renewed employment for an indefinite time. A glance will show that the venture will be remunerative, as it has been everywhere else. Each will be the recipient of special education. If the investment pays the insurance companies in Germany, it should pay the State.

In a special and classical report on pulmonary tuberculosis, issued by the Board of Health of New York City in 1897, the following statement is found: "We are convinced that no factor is so patent to-day in perpetrating that ominous death-list from pulmonary tuberculosis as the lack of proper facilities for the care of the poor of this city stricken with the malady." State care will not create a new expense, but money now misspent by city and county will be used at a proper time and in a sensible manner. The scheme seems vast, but the problem is stupendous. It has assumed proportions of magnitude through years of blindness and neglect. Since the presentation of this project last year, precedent has added

strength to the suggestion. Massachusetts has built and recently opened a State Hospital for Consumptives, and other States are moving rapidly in the same direction.

There are hopeful signs that the lead of Europe will be followed, and the "white plague" attacked along modern lines dictated by humane and intelligent ideas. Determined action should be taken now. I believe, in this instance, the intelligent public is in advance of the medical profession. Continued delay is almost incomprehensible. When threatened by cholera or epidemic, fear compels hasty and vigorous remedies regardless of expense—yet the ceaseless and fearfully destructive march of tuberculosis moves on unmolested, except by a small annual crop of medical essays which fail to elicit earnest or lasting attention.

In conclusion, there are strong reasons for the belief that death-rate from tuberculosis can be diminished fifty per cent. in ten years by the enforcement of well known safeguards. The gravity and extent of the evil is so great, and the difficulties to be encountered so numerous that centralization and action by the State will alone give a guarantee of prompt and sure results. Power to enforce and control prevention should be given the State Board of Health on the recommendation of a special State Commission appointed to investigate and report upon the best means designed to check the spread of tuberculosis, should be adopted and placed under the jurisdiction and supervision of the State Board of Health. State care of the incipient consumptive, so far as practicable, should be heartily encouraged. Recognition by the State, of the dread disease, and its duty to human victims is of pre-eminent importance. The proper care of the incipient consumptive is the most vital, philanthropic, and economic problem of our time, and efficient prevention must precede or accompany enlightened relief.

INGROWING NAIL; A COMPARISON OF METHODS OF OPERATION.*

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THE numbers of the "Index Medicus" published during this decade contain more than thirty references to the operative treatment of ingrowing nail. Some of the writers describe operations, original with them no doubt, which have been many times performed and frequently reported in the previous decade, or the decade before that, or for that matter in some other century, for operations for this trouble have been performed since the dawn of surgery.

* Read before the Surgical Section of the New York Academy of Medicine, January 9, 1899. For discussion see page 223.

Amat,¹ a Frenchman, in a short article upon this subject, published in 1889, gives no less than fifty-seven references; while Gosselin, whose ingenious operation has been one of those most frequently rediscovered, said in 1873: "There are few surgical troubles for which so many varieties of local treatment have been proposed. I have counted seventy-five different kinds which have been inspired by the desire to prevent recurrence."

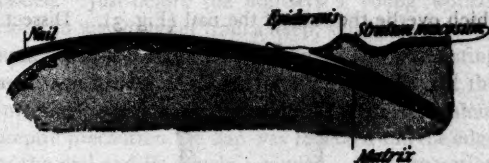
I have no thought to call from oblivion for your malediction the names of these seventy-five inventors. Many of them have long since met the reproaches of their unhappy victims. If the good that some of them suggested had outlived all the evil done by the others there would be no excuse for this review of the subject. Unfortunately, however, within our own time there have been men who, with right and left curved chisels, struck off one side or the other of the toe, including flesh, nail, and possibly a bit of the bone; others are still driving gouges blindly into the matrix, or performing some other barbarous operation.

Several theories have been advanced to explain the occurrence of ingrowing nail. Pointed shoes, neglect of the toes, and a habit of paring away the corners of the nails are generally admitted to be the chief factors of the etiology. They are not, however, the only factors. One of the daintiest women I ever saw had an ingrowing nail on each foot, which for more than a year resisted all her attempts to effect a cure with salves and cotton pushed under the sharp edges of the nails. I operated once upon a girl of thirteen, whose little sister, aged five, had a well-marked depression of the edges of both great toe-nails. Profiting by the experience of her older sister the mother had taken every precaution since the little one's infancy to guard against ingrowing nails. The shoes had always been of the best pattern and the toes were carefully tended, yet there were the edges of the delicate little nails pressing down deep into the flesh ready to cause an ulceration as soon as the least traumatism gave them a start.

When once an ulcer is formed the edge of the nail acts as a foreign body and keeps up the inflammation. Such is the immediate cause of the trouble; and without attempting to settle the ancient dispute as to whether the nail grows down into the flesh or the flesh grows up against the nail we may readily admit that there are three ways in which the cause may be removed. Something may be interposed between the flesh and nail; the nail may be removed from the flesh; the flesh may be removed from the nail. All palliative measures aim at accomplishing their end by one or more of these three methods.

Astringents, caustics, cotton, sheet tin, silver hooks, scraping the nail thin and bending up its edges, or paring away the sunken edges are some of the measures of separating the nail and flesh. And one may state with safety that most mild cases can be so cured by these simple means that recurrence will not take place if proper shoes and stockings are worn. Even

FIG. 1.



Longitudinal section of toe-nail (after Koelliker).

so humble a part of the body as the side of the great toe should not be wantonly sacrificed.

There are, however, aggravated cases in which the habits of the individual or the conditions of his toe make it probable that a cure cannot be obtained by these measures, or if thus obtained that it will not endure. Hence the need of radical operations. They can remove the cause in only two ways. They may permanently remove the edge of the nail; or they may permanently remove the flesh, but a single operation may, of course, do both of these things.

In comparing different methods of operation in order to choose the best it is necessary to remember two things: That every part of the nail grows straight out from the corresponding part of its root,

FIG. 2.



The incision.

and second, that the nail is formed wholly from the reflexion of the skin which lies under its posterior portion back of the curved white line and not at all from the superficial skin which overlies it. The particular portion of the stratum mucosum, the cells of which go to form the nail, is called the matrix (Fig. 1). An operation which fulfills all the requirements of a permanent cure, and with the least damage to the healthy parts, is performed as follows:

Scrub the toe with soap and hot water and disin-

fect it. Tie a strip of gauze tightly around its base to control the circulation and inject 2-per-cent. cocaine or eucaïn solution above and below the edge of the nail to be removed. Disinfect again. Make an incision through nail, skin, and matrix, beginning at the free end of the nail and running parallel to the ingrowing edge. It is not necessary that the strip of nail removed should be more than one-eighth of an inch wide (Fig. 2). Reflect the skin-flaps which overlie the root of the nail (Fig. 3). Dissect

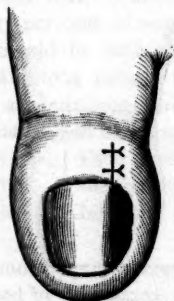
FIG. 3.



The flaps reflected.

out the portion of the matrix which is attached to the strip of nail, being especially careful to secure its extreme corner on the side of the toe. If granulations are abundant they may be lightly curetted away. Insert one or two fine black-silk sutures to hold the skin edges in place (Fig. 4). Apply a firm wet antiseptic dressing and a starch bandage. This

FIG. 4.



Ready for the dressing.

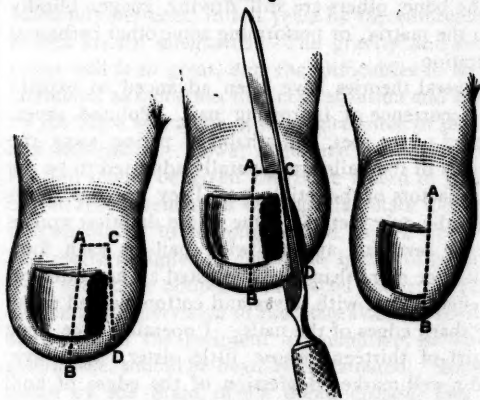
should be changed every day or two as there is often a minute drop of pus at the junction of the skin and nail. In nearly every case primary union of the skin may be obtained. The patient can wear his ordinary shoes in ten or twenty days.

Could anything be simpler? No tissue is sacrificed which it is not desirable to be rid of. The matrix is removed with certainty. It cannot be curetted or cauterized away without inflicting damage to surrounding tissues. It will not pull out with the nail. The sutures

may be omitted and the flaps held in position by the bandage, but a stitch or two insures an exact approximation of the skin edge. The patient does not need to go to bed, but the less he walks for a day or two the better.

The edge of the nail with its matrix has been removed in other ways. One of the best known of these methods is that which was described by Anger before the Surgical Society in Paris, July 17, 1889. He removed a section of the toe from its extremity back to beyond the matrix. As the matrix of the nail in an adult is within one-quarter of an inch of the joint,³ and in Anger's method the cut extends to the bone, the operation is a pretty serious one. Those who have performed it lately have been inclined to mitigate its severity by making the section V-shaped and extending it only a short distance on the bottom of the toe.⁴ That this was not Anger's style will be seen from the drawings (Figs. 5 and 6) which are

FIG. 5.



Anger's Operation (Amiard).

reproduced from a monograph⁵ of the method published in the next year, 1890, by Amiard, a pupil of Anger. The illustration of a "cured" toe which he gives makes comment unnecessary.

A still more humane modification of Anger's operation consists in the removal of an elliptical wedge-shaped piece of nail matrix and skin. This operation was practised by Gosselin⁶ some thirty years before Anger described the original operation of which it is technically a modification. It is not difficult, makes a small wound, and the amount of skin over the matrix, which it sacrifices, is of little moment perhaps. But it removes the whole gutter along the edge of the nail so that the toe is needlessly mutilated for all time to come, a point which may seem small to the surgeon, but it is one which is of considerable interest to the female patient as I have learned by experience. It was to avoid this defect that I hit upon the method above described,

which is, after all, nothing more than the plainest common sense applied to the plastic surgery of the toe. No one would ever think of removing, with an ingrowing wisdom tooth, the overlying portion of the cheek. Yet that is exactly what is done to the toe in all reported methods as far as I have looked up the literature of the subject.

The second way to keep the nail and flesh apart is to remove the flesh. This may be called, to invert an ancient phrase, taking the mountain away from Mohammed, a principle which, somehow or other, always has its advocates. Chief among them was Cotting. His method was simplicity itself. He sliced off the side of the toe. The nail, or a por-

FIG. 6.



Eighteen months after Anger's operation (Amiard).

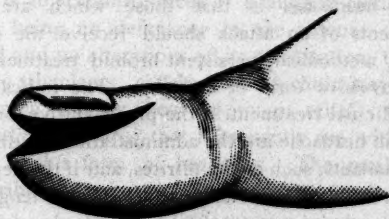
tion of it, was usually pulled out at the same time in order to give the ulcer an opportunity to heal undisturbed. As the raw surface thus caused is from half an inch to an inch in diameter from three to six weeks are required for its healing. The toe is, of course, permanently deformed, but as it is smooth and more pointed than before the deformity would probably be regarded with favor by most people. The time required for healing is a serious drawback and various surgeons have tried skin-grafting with a considerable amount of success. The graft should not be placed on the fresh wound but applied to the raw surface after a lapse of three or four days.

A far cleverer method of withdrawing the flesh from the nail was described by Howard⁸ of Texas, in 1893 (Fig. 7). His plan was to remove a wedge-shaped piece of skin and subcutaneous fatty tissue right around the toe from one side to the other and to suture the edges of the wound. In this manner the gutters along the sides of the nail are rolled open and the pressure of the nail on the ulcerated skin is relieved. Cartledge,⁹ in 1895, and Kane,¹⁰ in 1896, described similar operations, limiting the excision of tissue to the side of the toe which is affected. Such a wound ought to heal quickly and with little discomfort. I have never

seen the operation performed and cannot speak of the ultimate results.

All surgery carries with it an element of risk, and last month I was unpleasantly reminded that minor surgery is no exception to this rule. The simple operation described above I performed perhaps ten or twelve times last year. I think there was only one instance in which primary union was not obtained. Just before the holidays a young woman came to me for relief from a deep, stubby, ingrowing nail. She had repeatedly cauterized the granulating area with nitrate of silver, forming a slough, but the infection was apparently slight. With scrupulous aseptic precaution the flap was reflected and the edge of the nail and its matrix removed. The operation was painless, was quickly performed, and there was scarcely any loss of blood. A wet dressing was applied, and the patient, delighted with the lack of deformity, took a train for her home some 300 miles away, expecting to make a holiday of her convalescence. Six hours later intense pain began in the dorsum of the toe and the next day she cut the stitches though they were absolutely clean. The edges of the wound were pulled apart but no pus was found. As the pain continued a doctor was called and a deep incision was made from the middle of the base of the nail to the phalangeal joint, opening a minute abscess cavity. A violent cellulitis followed, there was necrosis of both phalanges, and finally amputation of the whole toe was performed at Johns Hopkins Hospital. The infection was due, I thought, to the hypodermic syringe, the only instrument which was not sterilized by heat; but the patient, who is also a surgical nurse, main-

FIG. 7.



Howard's operation.

tained the opinion that the abscess existed at the time of operation. She was, at the time, much run down in health, having badly overworked herself, so that her power of resistance must have been far below normal. This unfortunate result, while it in no way assists in the determination of the relative merits of different operative methods, shows that there is a certain risk in all attempts at radical cure, which must be remembered when the question to be

decided is whether palliative measures or an operation shall be resorted to.

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THE TREATMENT OF HEADACHE.

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(Continued from page 168.)

THE headaches associated with the neuroses that we are now considering almost always occur in people whose digestive and assimilative functions are disordered and whose avenues of excretion are more or less sluggish. These derelictions of function demand attention, but it is unnecessary, I believe, to make specific enumeration of the substances employed to encompass such ends. What has been said for the treatment of neurasthenic headaches, applies also for those occurring as a manifestation of the hysterical state, but the treatment of headache which accompanies the other two grand neuroses enumerated in our classification, *vis.*: epilepsy and exophthalmic goiter, require very different drug administration, although the general dietetic, mechanical, and disciplinary measures are the same.

The most important fact in the treatment of epileptic headaches is that those which are the equivalents of an attack should receive the same careful, methodical, persistent bromid treatment as the convulsive form of epilepsy. The indications for medicinal treatment in the preconvulsive form of epileptic headache are the administration of diffusible stimulants, such as the nitrites, and if the cephalalgia precedes the convulsive attacks for any length of time the administration of a large dose of one of the bromid salts. Post-convulsive epileptic headache is best combatted by some such diffusible stimulant as coffee administered in the shape of a hot, black infusion.

The headaches of exophthalmic goiter, which, in reality, are not to be differentiated in their origin or in their manifestations from the headaches of neurasthenia, but which are always of a throbbing character, are best relieved by absolute bodily and mental rest, and by the administration of aconitia in $\frac{1}{10}$ -grain doses, repeated every three or four hours

if the vascular tension be high, or by the administration of digitalis or its alkaloid in full physiological doses if the pulse be of low tension.

The treatment of headaches accompanying organic disease may be dismissed after very brief consideration, for, as a rule, it may be said that the only form of treatment is operative in all varieties of organic headaches save those due to syphilis and non-pyogenic infection. The latter require treatment directed immediately against the causes.

The headaches of the intoxications and infections may likewise be briefly dismissed. Those accompanying the infectious diseases do not call for any particular treatment aside from the measures taken to combat the infectious processes, while the treatment of headache due to the ingestion of vegetable or mineral poisons resolves itself into the very simple matter of preventing the further imbibition of the poison, be it tea, alcohol, tobacco, or poisonous substances administered therapeutically or encountered in occupations, and the elimination of any of the poison remaining in the system from the body. After that, the headache disappears on the restoration of general, including neural, nutrition. To bring about this restitution of nutrition, general tonic treatment, very similar to that described under neurasthenia, is required. And, meanwhile, the headache may be relieved temporarily by the administration of some of the prescriptions possessing analgesic properties already mentioned. A formula that I often use as a general tonic and stimulant in headaches following the infections and exogenous intoxications is the following:

Opil pulv. gr. ss
 Zinci phosphid. gr. ss.
 M. Ft. Pill No. 20. Sig. One pill three times a day.

It is to me nothing less than remarkable the tonic effect which one gets from this small quantity of opium. All the infections and intoxications, without exception, produce a more or less profound condition of general anemia, and this anemia must be reckoned with in estimating the nature and determining the treatment of the headache. Early in the treatment of such headaches some such searching tonic as the following should be administered:

B Ferri et ammonii citratis grs. xl
 Liq. potassii arsenitis m. xl
 Syr. zingiberis $\frac{3}{4}$ ss
 Inf. calumbæ ad. $\frac{3}{4}$ iv.
 M. Sig. Two teaspoonfuls after meals.

I am especially apt to give this mixture to children who complain of headaches following the infectious diseases, while for adults the *mistura ferri ammonii acetatis* is substituted for the citrate salt.

In the treatment of headaches resulting from the

absorption into the system of some endogenous poison, such as that of diabetes, uremia, and the auto-intoxications and infections, the general measures to be adopted do not differ materially from those already spoken of. The headache is combated when the formation of the poison and its absorption into the system is interfered with. In this way diabetic headaches are treated by diet and by the utilization of remedies against the anemia and oligocythemia, while uremic headache is combated by measures that prevent the formation of urea, and by those that facilitate its excretion. In uremic headaches accompanying chronic interstitial nephritis of slow progression, I use the following prescription as a diluent and diuretic with good effect:

℞ Potassii citratis 3 ii
Tinct. hyoscyami 3 ii
Spt. etheris nitrosi 3 ii
Inf. scopariæ 3 vi.

M. Sig. Tablespoonful in water three times a day.

If it is necessary to increase vascular tension, infusion of digitalis may be added to this mixture.

Headaches arising from such intoxication as that of ammonemia require only local treatment of the cystitis and the institution of measures to combat the anemia.

Headaches arising from auto-intoxication, the original source of the disease being stomachic and intestinal catarrh, functional perversion of the glands supplying the digestive juices, or through the activity of non-pathogenic bacteria, taken in from outside, form an important class, and one that is happily rather amenable to treatment. It must suffice me in this connection to say that after the general measures for the regulation of the alimentary tract and its associated functional dependencies, such as the overcoming of constipation, the adoption of suitable diet in catarrhal conditions, the stimulation of the liver to the production of a suitable kind and amount of bile, the administration of substances that contribute to the restoration of the pancreas and spleen, the treatment consists in the administration of substances that correct the apparent troubles of digestion, and of substances that quell the headache. A favorite prescription of mine for headache associated with flatulency and pyrosis is the following:

℞ Sodii bicarb. }
Bismuthi subgallate } aa. 3 i
Pulv. acaciæ }
Liq. ammonii anisi 3 ii
Aqua dest. ad. 3 viii.

Sig. Two teaspoonfuls before meals, repeated in three hours if necessary.

In headaches associated with atonic dyspepsia,

but without any considerable flatulency, I make use of the following pills, and especially in the headaches occurring in women:

℞ Ferri sulphatis } aa. grs. xv
Quiniaz sulphatis }
Sodii arsenitis gr. ss
Pulv. rhei }
Pulv. zingiberis } aa. grs. x.

M. Ft. Pill No. 12. Sig. One pill three times a day after meals.

The treatment of headaches due to disease of the circulatory system requires considerable discussion, not so much because of their frequency as because of the fact that if they are properly interpreted they yield readily to treatment. The headaches that accompany organic diseases of the heart, whether they be associated with excess or deficiency of propulsive power, naturally require treatment directed to that organ, as does any pulmonary condition which interferes with the return cerebral circulation. Headaches occurring with functional disturbances of the heart are oftentimes very amenable to therapeutic measures, not drugs. For instance, a heart that is working violently as the result of great physical effort or excitation of mind or body, may be so quieted by the application of a simple cold-water compress to the cardiac region that the accompanying frontal throbbing headache disappears promptly, and the efficaciousness of stimulating foot-baths and hot sitz baths in combating a headache of increased vascular tension within the skull is very well known. It is rarely necessary to administer the more powerful cardiovascular depressants in cases of this kind, the required equalizing of the circulation being obtained by hydric procedures and the administration of a few doses of the bromids. When headache is an accompaniment of a sluggish circulation, there being no deficiency in the amount of the blood and no alterations of its constitution, the diffusible stimulants, caffein and strychnin may be relied upon to bring about its prompt relief. Cannabis indica is a drug that I frequently use with good effect in this form of headache. The method of prescribing it is in the following pills:

℞ Ext. cannabis indicæ (English) gr. ½ to ss
Ext. gentianæ, q. s.
M. Ft. pil. No. 1.

Headaches that are dependent upon a general anemia are oftentimes extremely resistant to treatment, and although temporary improvement usually follows tonic and stimulating treatment, the anemia must be fought unswervingly for a long time to effect a complete cure, and to stay the recurrence of the headache. These headaches are usually accompanied by a very sluggish condition of the digestive tract, to combat which I have used with very

good results the following combination of tonics and laxatives in the shape of a dinner pill:

B	Quiniaz sulph.	{ aa.	.	.	grs. xii
	Ext. aloes aq.				
	Pulv. capsici.	{ aa.	.	.	grs. vi
	Pulv. ipecac.				
	Glycerini	.	.	q. s.	

M. Ft. pil. No. 12. Sig. One pill at midday.

Or, if associated with considerable vital depression I use the following pill instead, giving at the same time some absorbable form of iron:

B	Ext. nucis vomicæ	.	.	.	gr. ss
	Pil. rhei comp.	.	.	.	gr. iii
	Pulv. capsici	.	.	.	gr. ¼.

M. Ft. pil. No. 1. Sig. One pill at midday.

Naturally it is very often necessary to give at the same time, for its immediate effect, some analgesic or a combination of these with a stimulant, such as caffein, and such a prescription as one given above, containing caffein, phenacetin, and salol, usually meets the requirements.

Headaches associated with organic diseases of the blood-vessels, such as arterial sclerosis, arterio-capillary fibrosis, as it is oftentimes called, requires very methodical treatment in addition to the maintenance of the best possible degree of nutrition. Fortunately the number of medicines which are serviceable is very small, being covered practically by iron, nitrite of soda, one of the iodid salts, and occasionally one of the cardiac nervines, such as strophanthus. For the acuter manifestations of such disease, such as violent throbbing in the head, buzzing in the ears, and a feeling as if the head were being dragged forcibly backward the bromids are of service, especially when exhibited in connection with the foot bath, sitz bath, or full bath, to which pine-needle extract has been added. When these measures do not suffice I have frequently seen brilliant results follow the administration of a capsule containing cocain, camphor, and powdered opium, the latter in very small quantity. The value of nitrite of sodium as an agent to dilate the arteries does not seem to me to be sufficiently recognized. It has the great advantage over the other nitrites that it maintains the dilatation of the vessels for about four hours, whereas the action of nitroglycerin and nitrite of amyl is entirely over in less than half an hour. The necessity of recognizing that widespread fatty degeneration is the natural sequence of vascular sclerosis is very apparent, particularly in directing the dietary and physical hygiene of such a patient. Any considerable amount of fatty degeneration is inimical to an active degree of oxidation and as this process is at the basis of tissue metamorphosis and food combustion one must be on the alert not to administer food in such quantities as to clog up

the system with effete matters and therefore add another burden to the economy.

We must pass now to a brief review of the treatment of so-called reflex headaches. Although volumes have been written on the subject, it does not seem to me difficult to make judicious disposal of the subject in a few words. Lest it may be gathered that I underestimate the importance of disorder and disease of the sense organs in causing headache, I may say that it is my belief, based upon experience, that from one-third to one-half of all headaches are caused or influenced in their occurrence and maintenance by such conditions. This, however, does not prevent me from saying that the treatment summarized in a few words is, to remove the cause, either by operation or by the application of the indicated orthopedic appliances, such as glasses, and then treat the exhausted state of the nervous system which has been induced through the strain of imperfect organs doing the work for which normal physiological apparatuses were intended. Further than this, one or two facts should be kept in mind. The first is, if the headache dependent upon defective sense organs has existed for a long time, no amount of orthopedic appliances to that organ will vanquish the headache in a considerable proportion of the cases, and furthermore, many cases of headache due to defect in the sense organs require as well general treatment that the permanent cure may be fully encompassed. After having said this, it does not seem to me necessary to say in detail that patients who have astigmatism, hyperopia, insufficiency, etc., should be glassed. No more does it seem necessary to say that chronic turgescence of the nasal mucous membrane, or catarrh of the middle ear should be treated when found associated with a headache whose location and character seem to point to these abnormalities as its source. Such truisms go without saying. In latter years we have heard much of the lack of muscular balance of the eyes as a cause of headache, and a considerable literature has sprung up burdened with the nomenclature of esophoria, exophoria, and hyperphoria. These conditions a few men who claim special skill in overcoming them would have us believe are responsible for a large proportion of all headaches, as well as causative of such profound neuroses as migraine, epilepsy, and Huntington's chorea. But the consensus of opinion of those who have carefully studied the question and who, from their training and experience, as well as from their inherent mental qualities, are entitled to belief, is that such loss of muscular balance, whether due to improper implantation, innervation, or fatigue of certain eye muscles, has been enormously overestimated as a cause of

headache. It is difficult for one who has investigated this matter in an unbiased and critical state of mind to divorce himself from the thought that those who claim to cure so many scores of headaches by almost imperceptible tenotomies of the eye muscles do it for sordid and even less commendable motives.

Space precludes further consideration of the treatment of other reflex headaches, and even though it did not, some of them, such as uterine headache, might be disposed of in a word, *vis.*: put the pelvic organs in as nearly a normal state as possible, then forget the existence of the pelvic organs and center your attention on the individual.

I have previously spoken of a form of cephalalgia to which the name habitual headache is given, and a few words were devoted to a theory of its pathogenesis. It is diagnosed by process of exclusion. Its treatment is oftentimes an altogether unsatisfactory experience. It is usually associated with evidences of general lowered vitality and disordered functions in other parts of the body. These, of course, must be vigorously combated. Such headache is often accompanied by leucorrhea, and under such circumstances I not infrequently employ the following prescription:

℞ Ammonii chloridi	gr. lxxii
Fluid ext. hydrastis (non-alcoholic) }	aa. ℥ss
Fluid ext. viburnum opulus	
Elixir simp.	ad. ℥iii.
M. Sig. Teaspoonful three times a day.	

If the headache is accompanied by more or less ovarian pain, I sometimes substitute the bromid of ammonium for the chlorid salt. Taking it all in all, headaches of this nature are to be combated by maintaining the highest possible degree of nutrition, by the occasional employment of symptom medicines that are not opiates to relieve the pain, and by mental suggestion, particularly in those who tend to develop some degree of hypochondriasis.

After thus passing in review the important causes of headache and the necessity for the most searching examination of every system of the body in order to determine its pathologic relationship, it seems to me incumbent on him who writes of headache to say that despite the greatest diagnostic skill and the most herculean therapeutic efforts, the patient often remains in a frame of mind to say, paraphrasing Shakespeare:

How weary, stale, flat, and unprofitable
Seem to me all the physic of the world.

MEDICAL PROGRESS.

Hemorrhagic Ascites.—FINNY (*Dublin Jour. Med. Sci.*, January, 1899) describes a case in which the effusion of serosanguinolent fluid in the peritoneal cavity necessi-

tated repeated tapping. He was much puzzled by this condition, and for some time was of the opinion that the bleeding was due to the rupture of some vessel in the mesentery or omentum. Hepatic cirrhosis was considered and ruled out, on account of the absence of symptoms pointing to the liver. Before death occurred he inclined to the idea of malignant disease involving the peritoneum, and either the transverse mesocolon or the omentum. The post-mortem examination showed that this last diagnosis was the correct one. The tumor was extremely soft, full of large blood-vessels, and was considered to be of a sarcomatous nature. Neither Finny nor any one of the consultants who examined this patient had ever seen a case of hemorrhagic ascites, and by searching medical literature he was able to find only scanty mention of this symptom. An accurate diagnosis of peritoneal and omental cancer is extremely difficult. The presence of blood-stained ascitic fluid suggests it, but this may also be present in cancer of some of the abdominal organs, for example, the uterus. Cancer of the omentum may occur without ascites, or with ascites which is not bloody. The presence of tumors recognized either before or after tapping is a decided aid to diagnosis, but it may be that an accurate diagnosis cannot be arrived at until the abdomen is opened.

Bursa of the Hip and Their Diseases.—ZUELZER (*Deut. Zeit. f. Chir.*, vol., 50, p. 148) presents an exhaustive study of the above-mentioned subject with brief histories of fifty-nine cases. In fourteen of these the bursa affected was the bursa iliaca or subiliaca, while in the remainder the bursa trochanterica profunda was the seat of disease. These two bursae are thus seen to be by far the most important of the bursae about the hip. Many others have been described by anatomists, of which the subcutaneous bursa over the great trochanter, or the bursa over the insertion of the gluteus medius in the great trochanter, or the bursa of the gluteus minimus in the corresponding situation may serve as examples. Heineke described in all fourteen bursae about the hip, while a Swedish anatomist, Synnestvedt, found twenty-one with greater or less regularity. Normally these bursae contain so little fluid that not a single drop can be squeezed out of them, yet they play an important part in the motions of a joint, and thus have not been sufficiently recognized in injuries and diseases of joints. The symptoms produced by inflammation of the subiliac bursa are those of a swelling below Poupart's ligament, which is more or less fluctuating and more or less tense, and may appear in one place, or in more than one, and if the latter the fluid may be pressed from one swelling into the others. The cavity of the bursa may also connect with that of the joint. If inflammation is acute the pain will, of course, be more marked, but by the pressure of the swelling on the crural nerve there may be produced sharp pain in the thigh down to the knee, even though acute inflammation is absent. The thigh is held in a position of abduction, outward rotation and light flexion. This is the typical position; occasionally the limb is abducted and rotated inward. If the position taken is exaggerated by the surgeon no pain is caused. Motion in the opposite direction, whether active

or passive, increases the pain. In narcosis all motions are possible. A coxitis in the early stage shows these same symptoms, but in this disease the flexion is more marked. It is important to remember that in bursitis the trochanter is exactly in Nelaton's line as the limb is not at all shortened. This fact will serve to differentiate bursitis from coxitis with subluxation, and from fracture of the neck of the femur. As bursitis usually follows injury and develops slowly, and as rheumatism, gonorrhea, etc. may also be factors, it frequently happens that the affected thigh measures less in its circumference than its fellow. In bursitis trochanterica profunda the swelling lies at the upper margin of the great trochanter to the outer side of the femur and can reach to the middle of the thigh. Here, too, the limb is held in a position of light flexion, abduction, and rotation, the position which best relieves the affected muscle. This affection can easily be mistaken for coxitis, especially if the bursitis is suppurative, since many cases of coxitis point in the same situation. Careful pressure directly upon the trochanter is not painful in bursitis, nor is pressure upon the anterior or posterior aspects of the hip-joint. In coxitis pressure in any one of these three situations gives pain. Blows upon the heel and walking are both painful in coxitis but not in bursitis. The differentiation in diagnosis between suppurative bursitis and osteitis is more difficult unless a sinus has exposed bare bone. Suppurative bursitis requires an early incision, curetting, and drainage. This should be done early to avoid an extension of the inflammation into the hip-joint. In non-suppurative bursitis, baths, compresses, iodine, massage, pressure, etc., may be employed or the contents may be aspirated and pressure then applied. If these milder measures do not succeed tincture of iodine may be injected into the bursa in order to obliterate its cavity, or better still, it may be laid open and a whole or a part of the sac may be removed. If a bursa communicates with the hip-joint the injection into it of the tincture of iodine will be a dangerous procedure. In radical operations asepsis is of prime importance, else a troublesome fistula may follow.

THERAPEUTIC NOTES.

Dressing for Ulcers of the Leg.—MARCUSE (*Therap. Monatshefte*, December, 1898) recommends the following lotion for particularly obstinate sloughing ulcers of the leg:

R Alumin. pulv.	3 ij
Plumbi acet.	3 x
Aq. dest.	℥ xij.

A piece of gauze several layers thick is to be wet with this solution and applied to the ulcer. Other compressors also wet with this solution and larger than the first are laid upon them, and the whole is covered by gutta-percha tissue, and held in place by a firm bandage. This solution has the desirable properties of keeping the wound dry and limiting its secretion for it is a powerful astringent. Furthermore, it is antiseptic, and lastly it has a soothing, cooling effect upon the inflamed leg. It is desirable that

the patient lie in bed for a few weeks, though if the ulcers are not too large it is possible to cure them without enforced rest.

Plantar Hypersecretion Cured by the Use of Formalin.—GERDECK (*Therap. Monatshefte*, December, 1898) has had satisfactory results in the treatment of hypersecretion of the sole of the foot by the use of a ten-per-cent. solution of formalin applied morning, noon and night. The tender skin around and under the toes receives only two applications. Usually the third penciling is sufficient to stop all secretion, remove the odor, and leave the skin in a dry, toughened condition. Sometimes a fourth or fifth application may be needed to effect a cure. At the close of treatment four or five drops of concentrated solution of formalin are dropped into each boot. The secretion of sweat begins to show itself in two or three weeks, and by two or three months the treatment will have to be repeated, though in a milder form. Powders containing formalin are not as desirable as the solutions, but they are well adapted to dusting in the boots to take away the disagreeable odor.

The Comfort of a Patient a Factor in His Recovery.—VON LEYDEN (*Centralbl. f. inn. Med.*, December 10, 1898) looks upon the comfort of a patient as an important factor in his recovery. In a certain sense it is a cure of pain. The situation of a patient who has fever, dyspnea, paralysis, or peritonitis, or who is anemic from hemorrhage, etc., is most important. In addition the physician should pay careful attention to the amount and character of the patient's nourishment. The writer warns against the granting of the whims of the patient, and considers it to be the duty of the physician to rouse the energy of the patient rather than to make him effeminate.

Treatment of Granular Conjunctivitis by Salicylic Acid.—MOTY (*La Presse Med.*, December 24, 1898) has used with success in the treatment of the milder forms of granular conjunctivitis a solution of one part salicylic acid to ten parts of sixty-per-cent. alcohol. A bit of absorbent cotton on the end of a probe is wet with this fluid and squeezed a little so that no drops will fall from it. The eyelids are then inverted and held so by one hand, while the wet cotton is passed over the affected portions. Before and after the cauterization, the inner surfaces of the lids are wiped with cotton wet in a mild antiseptic solution. The pain is sharp at first but soon passes away so that patients do not object to the treatment. The cornea is not affected at all by the salicylic acid, and if ulcers are present there is no danger that they will become pigmented by it. The salicylic acid should at first be used every day, then every two days, twice a week, and finally once a week. No other treatment is needed to effect a cure, if there are no complications. The improvement is noticeable at once, even more so than is the case with many other remedies, and it increases as treatment is continued, so that in some months' time, a cure may be effected without interfering in the least with the occupation of the patient, even in long-standing cases with infiltration and vascularization of the cornea.

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KISSING THE BOOK.

NOTWITHSTANDING the evident danger of infection and communication of disease involved in the custom, it is still habitual for witnesses in most of our courts of justice to kiss a copy of the Scriptures when taking an oath. It is not required by law, but is left to each witness' own taste in the matter. We have been sincerely pleased to note that the police magistrates in New York have been discussing the question of definitely abolishing the custom in their courts. There is a certain amount of objection to the proposed reform on the part of those who think that an oath loses most of its sanctity in the eyes of a good many people, unless accompanied by some outward sign that connects it directly with the Holy Scriptures. We think, however, that the influence of this superstitious feeling is exaggerated, and that even the most ignorant can easily be made to realize that the obligations of an oath are not lessened by the absence of the Bible.

The custom is so disgusting, considering the promiscuous class of people who follow it, and the opportunities it affords for the spread of the most loathsome diseases, that it is hard to understand how

it has endured down to our day. Bacteriologic examinations have demonstrated over and over again a most heterogeneous collection of microbes some of them virulently pathogenic on the covers and leaves of books used for this purpose.

The good woman who, thinking the kiss obligatory, came not long ago to one of the courts with her own copy of the Scriptures, was a most practical and wholesome individual. Let this serious factor in the spread of disease be no longer tolerated. It is a simple thing to do away with the custom; it depends, we believe, entirely on the presiding judicial authority of each court.

TYPHOID FEVER IN PHILADELPHIA.

THE reports of the respective Boards of Health of the cities of New York and Philadelphia for one week each during the month of January are before us. In Greater New York, with an estimated population of over three and a half millions, fourteen cases and six deaths from typhoid fever are reported; in Philadelphia, with a population a little over a million, the total number of new cases of typhoid reported is 427 and there were 40 deaths from the disease. Could there be any more bitter reflection on municipal misgovernment than is afforded by such figures? Typhoid is an easily preventable disease. The great cities of the Old World have practically gotten rid of it. Cases of typhoid are extremely rare in Vienna, while in Berlin, as our foreign correspondent noted at the beginning of last year, the occurrence of a case of typhoid in the autopsy-room of the Charité, where nearly 2000 autopsies are performed every year, is such a rarity, that particular attention is called to it and special study made of it as of some curious, infrequent, pathologic condition. A great city of the New World in the midst of our boasted progressive American civilization permits its citizens to be carried off by typhoid year after year and does not wake from the disgraceful lethargy of its criminal negligence.

What a record is that given by our Philadelphia correspondent last week in the statistics of typhoid fever in that city for the last ten years! There has been an average of nearly 3000 cases of typhoid every year and over 500 deaths; and these ten years are almost the last ten years of this enlightened Nineteenth Century, and the last of the ten years is

the worst of them all. Philadelphians are to be congratulated on their long suffering. We hope they will reap a reward for it in another world since it is not the sort of virtue that is rewarded in this. Perhaps for this reason they are satisfied to be hastened out of it aforesaid.

If the police department of Philadelphia were to allow 500 people a year to be killed in the streets of the city and some 2500 more to be laid up for months because of the attacks of footpads, would Philadelphians in thorough-going perfect Quaker spirit meekly submit to that too? Or if they dared to protest and their protest was answered by the declaration that the presence of factions in the city council, each one striving to get boodle for itself regardless of citizens' lives and safety, prevented agreement on any plan by which the police might be made more effective, would they shake their tolerant heads and murmur "ah! these city fathers, who can do anything with them?" and then go on about their business hoping they would not be among the next to be waylaid?

The present state of affairs is a blot upon civilization, a crying shame in the face of the world. No Philadelphian should presume to raise his voice in any question of general interest and importance, while the city in which he lives is under this awful cloud. There must be an unlimited supply of the material out of which slaves are made dwelling within the shadow of Independence Hall when this flagrant violation of the inalienable right to health and the pursuit of happiness is allowed to go on year after year and the mass of the people remain indifferent. *Quousque tandem?*

AUTOPSIES, THE ANTIVIVISECTIONIST, AND PAGAN REVERENCE FOR THE DEAD.

ONE of the serious objections, on the score of inhumanity we suppose, that was urged against the management of the General Hospital at Vienna by the zealous antivivisectionists at their recent meeting in Philadelphia, was that an autopsy is performed in the case of every patient that dies in the hospital. Like many statements made by the antivivisectionists this is not entirely true. Only those cases are subjected to autopsy that are expected to furnish some instructive pathologic feature. This condition

obtains in the majority of the patients that die in the hospital but by no means all.

As the result of the opportunities afforded in the autopsy-room Vienna, since the days of the great Rokitsansky, who either made personally or oversaw 100,000 autopsies it is said, has held the first place in Europe for the study of morbid anatomy and as a consequence also of clinical diagnosis. How many of these carpers at what they do not understand realize how much clearer obscure internal conditions have become as the result of all these autopsies? Each one adds but little, some bring not the slightest mite of addition to our knowledge of disease, but all together they have created the one branch of medical science which to-day rests on a secure scientific foundation—pathology,

The truly senseless phase of this discussion, so conspicuous at the recent Philadelphia meeting, reveals the true inwardness of the antivivisectionist movement and its fanatical opposition, for certain merely sentimental reasons, to scientific advance. Is it any wonder that the medical profession, though most of its members are deeply interested in the prevention of animal suffering and realize certain abuses in experimental work, is opposed to allowing such people any voice in its regulation of animal experimentation?

Unfortunately their claim of a certain inhumanity in the making of an autopsy finds a sympathetic echo in the minds of too many people in America. There is the widespread realization that it is only by the exact study of the nature of disease in the human tissues that any secure advance can come in medicine. Yet when there is a question of autopsy upon a dead friend or even acquaintance there is a feeling of objection that arises and leads, in many cases, to absolute refusal. An example of this has just occurred. A patient suffering from an extremely rare disease, acromegaly, a disease whose pathogeny is as yet very obscure, died recently in a Western town and the friends had the body cremated lest it should by any chance ever come into the doctors' hands.

As a rule patients themselves have not this feeling and are very willing that their bodies should serve, after death, as an object lesson by which other people may be saved suffering and spared to longer life. The feeling of opposition in the matter goes beyond the circle of friends, however, and organizes meth-

ods to keep even the poor who die in hospitals from furnishing at least that much return to medical science for their care and treatment.

This is a false sentiment not engendered by any Christian reverence for the dead. It is a relic of pagan times of what the French call *la culte des morts*, the pagan worship of the dead. The pre-Christian anatomists had to learn whatever of anatomy they could from animals. Dissection of human bodies was a mortal offense. In the midst of the present-day growth of a too sentimental socialism this feeling of supposed reverence for the dead is being allowed to acquire too prominent a place. It should have no weight at all beside that other precious feeling that whatever promises to lessen the sum of human suffering is of the essence of right and goodness and should have no obstacles put in its path. Physicians have many an opportunity to inculcate this lesson in the matter of opposition to autopsies and we fear they do not always improve them with the zeal that their devotion to the cause of scientific medicine should dictate. Our country will not take her place among the nations of the earth as a great contributor to medical science unless ample opportunities are afforded on all sides for the detailed study of disease and its processes.

CEREBRAL INJECTIONS OF ANTITETANIC SERUM.

THE good results obtained in the treatment of diphtheria by means of serum-therapy has encouraged similar and persistent attempts in the treatment of nearly all the infectious diseases. Tetanus, one of the most fatal of the entire group, has not been omitted in these investigations. Not content with the comparative failure which attended subcutaneous injections, the antitoxin was tried intravenously, but still the results were by no means promising. The researches of Roux and Borrel, at the Pasteur Institute, Paris, led them to these conclusions: "The tetanus antitoxin, when injected into animals, remains in the blood, whereas the toxin (previously absorbed) is extracted from it and 'fixed' by the nerve-cells. The antidote does not come in contact with the poison, and the two substances, though so near each other, fail to meet. The serum is efficacious against the toxin which is placed under the skin because the greater part of it

enters the blood, but it proves powerless against the poison that has already reached the nervous elements." (Dr. Rambaud, in the *New York Medical Journal*, December 17, 1898.) We now readily understand the whole difficulty. The subcutaneous and intravenous injections were productive of so little good merely because they did not reach the seat of trouble save in the minutest amount. As a rule, subcutaneous injections have not been resorted to in cases of tetanus until the disease has been well advanced, that is to say, until a great part of the toxin manufactured by the tetanus bacilli has been "fixed" in the nerve-cells. In order to reach these nerve units, the toxin must travel the route of the circulation, so that when any good has been accomplished by the subcutaneous and intravenous injections, it has been through the neutralizing effect upon these toxins within the circulation, but little if any effect being produced upon the toxins "resting" in and exerting their deleterious action upon the nerve-cells.

If this theory be true, the only hope of success with subcutaneous or intravenous injections lies in their early application, thus keeping the blood in a diluted antitoxic state until all danger of absorption of toxins from the original site of infection is past. If, however, the opportunity for thus combatting the toxin while in the blood-current be neglected, the only hope of reaching it efficiently must be through some method that brings the antitoxin face to face with the toxin in the cells of the cerebrum. Suiting the action to this logical conclusion, the bold experiment was undertaken of injecting tetanus antitoxin directly into the brain substance and with gratifying results. Rambaud has collected reports of twelve cases in which the intracerebral method of injecting tetanus antitoxin was followed, and the results recorded have been far better than those of any other plan of treatment thus far produced—five recoveries. Of these twelve cases, three of the patients were treated in this country, with a mortality of two, but the histories given of the latter demonstrate that neither was a fair example on which to rest the value of the treatment, as one was dying at the time of the injection, while the other, though apparently recovering from the tetanus, succumbed to renal disease, a concomitant of a general septic condition into which the patient had fallen. In the patient who recovered, reported by

Church, the tetanus developed twelve days after the primary injury, a large lacerated wound of the leg produced by glass broken during a severe fall. Six days after the onset, that is to say, when the poison had become fixed in the nerve-cells, antitetanic serum was used subcutaneously, but with little benefit. Improvement being but temporary, it was decided the next day to make an injection of the serum into the frontal lobe of the brain. After trephining the skull, which was done under antiseptic precautions, sixty minims of the serum was slowly deposited to a depth of more than two inches, the entire injection taking longer than ten minutes. The subsequent history was comparatively uneventful, the patient making a good recovery.

If we accept the observations of Roux and Borel, the neutralizing of the poison stored in the brain-tissue by injection of an antitoxin into this tissue is also to be accepted. Indeed, the good results obtained by means of this method after subcutaneous and intravenous injections have failed, would go far to show that these observers are correct. It would seem, also, that the right thing to do in all cases of tetanus, regardless of their mildness or the reverse—all cases of acute tetanus must be considered grave at any stage—to proceed at once to the intracerebral injection, at the same time not neglecting to neutralize the poison in the blood by subcutaneous or intravenous treatment or both.

ECHOES AND NEWS.

Professor Osler Will Deliver the Cavendish Lecture.—Professor William Osler of Johns Hopkins University has accepted an invitation to deliver the Cavendish lecture for 1899 before the West London Medico-Chirurgical Society.

Hospitals' Bills Rejected.—The Auditor of the War Department at Washington has refused to allow the payment of bills from hospitals for the care of sick and wounded soldiers who were detained under treatment after the muster-out of their regiments.

Dr. Woods Hutchinson Lectures in London.—Dr. Woods Hutchinson, Professor of Comparative Pathology in the University of Buffalo, who is at present studying in London, has accepted an invitation to deliver a series of lectures before the Medical Graduates' College and Polytechnic, London.

Fatal Influenza.—On February 12th a cablegram announced that there are 2342 cases of influenza in Christiania, Sweden, and that there were in the week ending February 12th, 198 deaths from this disease. In Stock-

holm there were 3194 cases of influenza and 229 deaths during the week ending February 12th.

Oppose Ten-Hour Bill for Drug-Clerks.—At a meeting of the Manhattan Pharmaceutical Association, held in the New York City College of Pharmacy, on February 4th, a resolution was adopted which protests against the passage of the bill introduced in the Legislature by Senator Ford and Assemblyman Maher prescribing a ten-hour working day for drug-clerks.

Hospital-Ship for the Philippines.—The Hospital-ship "Relief" left Washington on the 15th inst., and will proceed to Manila via the Suez Canal; she has on board 150 additional hospital-corps men, ten to fifteen acting assistant-surgeons, a number of hospital stewards, and a large quantity of medical supplies for the sick and wounded. The "Relief" will, after reaching Manila, become a floating hospital, for which purpose she is provided with 300 beds.

The Government Hospital for the Insane.—Dr. Godding, Superintendent of the Government Hospital for the Insane at Washington, D. C., makes an urgent appeal for additional accommodations for patients. Since the beginning of the war with Spain 107 insane men from the Army and Navy have been received into the hospital. They include survivors of San Juan and Manila. It is not improbable that 100 more such cases will come in during the next fiscal year. There are now 1927 patients in the institution.

Special Course of Lectures at the Michigan University.—The special annual course of lectures before the Medical Department of the University of Michigan will begin February 25th. Dr. Dock will deliver the first three lectures on "Malarial Fever"; Dr. Cushney will follow with four lectures on the "Mammalian Heart", and Dr. Nancrede will continue the course by four lectures on "Military Surgery," illustrated by his recent experience in the Spanish-American War. The series will be closed by four lectures on "Yellow Fever," by Dr. Novy.

Smallpox Eradicated from Holguin, Cuba.—Captain Woodson, surgeon in the Regular Army, reports that the smallpox epidemic in Holguin District has been totally exterminated. The disease had prevailed there for twelve years under the Spanish administration, but was vanquished in three months by the scientific methods of the Army. More than 10,000 persons were vaccinated, and 1200 patients with smallpox were cured. Not a single American soldier contracted the disease, although they did guard-duty at the lazarettos. The sanitary condition of the district is now almost perfect.

Yellow Fever in Cuba.—Dr. R. Echeverria, brigade-surgeon, who was appointed by Governor-General Brooke to investigate the outbreak of disease in the camp of the 202d New York Regiment at Pinar del Rio, reports that the sickness is yellow fever. Dr. Echeverria advises the immediate removal of the camp from its present location. Dr. Doty, the Health Officer of New York, who has re-

cently returned from an inspection tour at Havana, reports most satisfactory progress in cleaning the streets of Havana, and in consequence improvement in the health of the city. He deprecates, however, the great influx of families connected with the Army, and predicts serious consequences provided they remain beyond the limits of the healthy season.

"Passed Away" in Christian Science.—The *New York Times* of February 10th states that Henry Reynolds, sixty years old, living near Tarrytown, New York, died on February 9th from an attack of acute rheumatism. He refused to have a physician called and was frequently visited by a Christian Scientist from New York, who stated there was nothing the matter with him and that his severe pains were imaginary. Shortly after the Christian Scientist's last visit the sick man said he could not see and died within a few hours while sitting in his chair. On February 12th an inquest was held; the verdict was as follows: "Henry Reynolds came to his death from heart failure and a rupture of a hepatic abscess into the abdominal cavity, and we censure John L. Roberts, the Christian Scientist, residing at the Omaha Flats at Sixty-fifth street and Columbus avenue, New York, for neglect to advise the family of the deceased to call a practising physician." Reynolds was worth \$200,000.

Program of the Next Meeting of the American Medical Association Already Being Outlined.—At the June meeting of the American Medical Association, in addition to the regular programs, the Section on Ophthalmology and that on Laryngology and Otology will devote the morning of the second day, June 7th, to a joint meeting, under the chairmanship of Dr. Casey A. Wood of Chicago, and of Dr. Emil Mayer of New York. The subject for discussion will be "The Relation of Ocular Diseases to Affections of the Nose and Neighboring Cavities." Four papers are to be read on this subject, *by invitation*, as follows: Dr. Charles Siedman Bull of New York, on "Some Points in the Symptomatology, Pathology, and Treatment of the Sinuses Adjacent and Accessory to the Orbit," Dr. D. Bryson Delavan of New York, on "Nasal Stenoses in Their Relation to Ocular Disturbances," Dr. Joseph A. White of Richmond, Va., on "Eye Troubles Attributable to Nasopharyngeal and Aural Disturbances," and Dr. J. H. Bryan of Washington, D. C., on "Diseases of the Accessory Sinuses in Their Relation to Diseases of the Eye." There will be a general discussion on the main question.

The Massachusetts Hospital for Tubercular Patients.—A supplemental report, dated December 31, 1898, regarding the above institution has been published, showing the admission of eighty-six patients since October 3d, which was the date of reception of the first patient. The hospital is located at Rutland, about twelve miles from Worcester, and is about twelve hundred feet above sea-level. The town wherein it is situated happens to be at the exact geographical center of the State. The hospital is built on the pavilion plan and will accommodate about two hundred beds when fully organized. It is not

intended for the incurable. Its physicians say: "It has been a source of gratification and surprise to see how quickly and contentedly the patients have adopted the special hygienic methods used for treatment, namely, almost constant life in the open air, whether by walking or reclining on the piazza, and the ingestion of nourishing food. The remarkable change in the aspect of these patients after even a short stay at the hospital would convince the most casual observer of the efficacy of the treatment upon the general condition of the patient."

Massachusetts has been the first to establish a State institution founded upon the principles of the now great sanatoria in Europe.

Obituary.—Dr. William C. Campbell of New York City died February 5th from pneumonia after an illness of one week. Dr. Campbell was born in Corea, N. Y., August 29, 1854. He was graduated from Princeton University in the class of 1877, and from the College of Physicians and Surgeons in 1880. At the time of his death he was attending physician to St. Luke's Hospital and the New York Orphan Asylum. He leaves a widow and two children. Dr. Campbell was a member of the University and Princeton Clubs, and the Academy of Medicine.—Dr. George H. Rohé of Baltimore died suddenly, February 9th, in New Orleans, whither it is said he had gone to attend a medical society meeting. He was the Superintendent of the Maryland State Insane Asylum, and had been prominent as an alienist and sanitarian.—Dr. James H. Etheridge of Chicago died suddenly in that city from heart disease February 10th. He was Professor of Therapeutics and Medical Jurisprudence in Rush Medical College, ex-president of the Chicago Medical Society, and a member of the American Gynecological Society.—Dr. Henry E. Keyes of New York died suddenly at Ardsley-on-the-Hudson February 6th. After a social function at Ardsley Dr. Keyes and his wife retired to one of the guest-rooms of the Ardsley Casino. At ten o'clock the following morning both were found asphyxiated by gas which had escaped from a gas-stove, unquestionably by accident. Dr. Keyes was a brother of the well-known specialist, Dr. Edward L. Keyes of New York.

Report of the War Commission.—In the report submitted to the President on February 8th by the commission appointed by him to investigate the conduct of the War Department in the war with Spain, it is stated that at the outbreak of the war the Medical Department was altogether unprepared both in men and materials to meet the necessities of the army called out; there was not such investigation of the sanitary conditions of the army as is the first duty imposed upon the department by the regulations; that the nursing force during the months of May, June, and July was neither ample nor efficient, reasons for which may be found in the lack of a proper Volunteer Hospital Corps, due to the failure of Congress to authorize its establishment, and to the non-recognition, in the beginning, of the value of women nurses and the extent to which their services could be secured; the Medical Department was seriously crippled in its efforts to furnish all medical hospital supplies, because of its ina-

bility to have supplies transferred from point to point except through the intermediation of the Quartermaster's Department; that a vast deal of good work was done by medical officers, high and low, regular and volunteer, and there were unusually few deaths among the wounded and the sick. The report recommends: (1) A larger force of commissioned medical officers. (2) Authority to establish in time of war a proper volunteer hospital corps. (3) A reserve corps of selected trained women nurses ready to serve when necessity shall arise, but under ordinary circumstances owing no duty to the War Department except to report residence at specified intervals. (4) A year's supply for an army of at least four times the actual strength of all such medicines, hospital furniture, and stores as are not materially damaged by keeping to be held constantly on hand in the medical supply depots. (5) The change of transportation to such extent as will secure prompt shipment and ready delivery of all medical supplies. (6) The simplification of administrative "paper work" so that medical officers may be able to more thoroughly discharge their sanitary and strictly medical duties. (7) The securing of such legislation as will authorize all surgeons in medical charge of troops, hospitals, transports, trains, and independent commands to draw from the Subsistence Department funds for the purchase of such articles as may be necessary to the proper treatment of soldiers too sick to use the army ration; this to take the place of all commutation of rations of the sick now authorized.

CORRESPONDENCE.

IS THE DAY OF THE DIDACTIC LECTURE A THING OF THE PAST?

To the Editor of the MEDICAL NEWS.

DEAR SIR:—If there is one feature characteristic of so-called movements of reform it is the fact that they go from the extreme which is to be remedied to another extreme which is equally in the nature of an abuse, and the very great improvement which has occurred in laboratory and bedside teaching in the great medical schools during the past few years has put it into the minds of some persons to assert that the didactic lecture should be excluded from the medical curriculum on the ground that it is a relic of what might be called barbarous times in medical teaching.

Recently, with its characteristic ardor, the *Philadelphia Medical Journal* has attacked the subject of the didactic lecture in a way which seems to me is not entirely justified by the facts in the case, and I am glad to note that in a still more recent issue of this journal, Dr. Barton Cooke Hirst, Professor of Obstetrics in the University of Pennsylvania, takes issue with the editorial in question and shows very clearly that the didactic lecture, if properly given, is of very extraordinary value to the student of medicine. To use Dr. Hirst's words: "There is no greater force in medical education to-day than the didactic lecture properly given." And again the lecturer must be able to impart his knowledge to others, must be

familiar with the current world literature and should use illustrations which are really illustrative and interesting. These attributes are as necessary to good teaching when given to small sections of a class as they are to didactic lectures given to large bodies of men, and to assert that didactic lectures are so valueless as to be useless, is also to assert that a vast number of didactic lectures dealing with other themes than medicine, are of no possible value. The popularity of lectures upon history, literature, art, and travel attests the fact that people enjoy and learn much by attending them, and in addition to imbibing statements of fact which fall from the tongue of the capable teacher, there is in the medical didactic lecture a possibility for the student to grasp the necessary details, in connection with the lecturer's theme, which are so essential and so valuable in practical medicine.

Few things can be more uninteresting than dry recitations concerning medical topics, and no means of teaching so well as the didactic lecture enables the student to benefit by the personal experiences of the teacher at whose feet he is studying. While it may be the fashion just at present to bring scientifically accurate laboratory methods to the diagnosis and study of disease those who are engaged in the active practice of medicine recognize thoroughly that there is something else equally valuable to the career of a successful physician, and that he must be possessed not only of technical skill but of medical instinct and understanding. There is no better stimulus to this understanding than to follow a course of lectures, such as were given in times gone by by such a man as Dr. D. Hayes Agnew, or at the present time by Dr. J. M. DaCosta, and no one who has heard these masters of medicine can for a moment doubt that it would be unwise to abolish the didactic lecture from the medical course.

Very truly yours,

H. A. HARE, M.D.

PHILADELPHIA, PA., January 25, 1899.

OUR PHILADELPHIA LETTER.

[From Our Special Correspondent.]

BLIZZARD WEATHER—TWO UNUSUALLY LONG UMBILICAL CORDS WITH FIVE TURNS AROUND THE CHILDREN'S NECKS—EMBOLISM OF THE POSTERIOR TIBIAL ARTERY BY AN ATHEROMATOUS PLATE—LOCAL BOARDS OF HEALTH—OVERCROWDING OF THE STATE INSANE ASYLUM AT NORRISTOWN—PERSONAL NOTES—OBITUARY—HEALTH STATISTICS.

PHILADELPHIA, February 14, 1898.

THE miniature blizzard which struck Philadelphia last week has caused a vast amount of sickness and distress, particularly among the poor, and reports are coming in from every side of cases of frost-bite, pneumonia, and other maladies incident to such weather conditions as we have had for the past week. Sunday, by special order of the police, "all business incident to the necessities of life may be carried on without interruption," which meant the delivery of coal, groceries, etc., and wagons were to be observed all day Sunday engaged in this traffic. It is to be regretted that typhoid fever cannot be, or rather is

not, checked by cold, for with the thermometer hovering around zero we might look for one blessing to be derived from this storm.

At a meeting of the Philadelphia County Medical Society, held Wednesday evening, February 8th, Dr. J. Torrance Rugh reported "Two Cases of Unusual Length of Umbilical Cord with, in Each Case, Five Turns around the Child's Neck." Both cords measured between fifty and sixty inches, and this Dr. Rugh considered unusual. The longest umbilical cord mentioned in literature measured nearly ten feet. The turns around the neck were unusual, though a case with eight turns has been reported; while this latter complication is more common usually in male children, in these two cases one was a boy and the other a girl, both of whom survived.

Dr. Frederick A. Packard reported a case of "Embolism of the Posterior Tibial Artery by an Atheromatous Plate." The case was interesting because of the visible evidence of an unusual cause of embolism, and the specimen which was exhibited showed a calcareous plate firmly embedded in a white organized thrombus, which completely filled the blood-vessel. This occurred in a middle-aged woman upon whom a diagnosis of an embolus in the thoracic arch of an atheromatous aorta had been made. The plate had probably arisen there, and had been carried down to the posterior tibial artery. Sharp, stabbing, sudden pain was complained of, which became more and more intense. Forty-eight hours later the foot became cold and pulseless. A line of demarcation formed, and suppuration was evidenced by a differential blood-count. Dr. Joseph W. Hearn amputated the leg just below the tubercle of the tibia, but the woman died from exhaustion. Much to Dr. Hearn's and Dr. Packard's surprise the embolus was found just at the point where the artery had been divided. The aorta was found to be atheromatous, and the seat of a large number of calcareous plates. In the discussion which followed Dr. Hearn said that had he known the posterior tibial was involved, he would have amputated above the knee as a matter of course. He described the various kinds of gangrene, and said he wished to go on record as believing that one should not wait for a line of demarcation before operating, especially when sharp, sudden, stabbing pain is complained of, for he believes this to be an infallible sign.

Dr. S. S. Towler of Marionville has introduced a most excellent bill in the Legislature which provides that the school directors of each township shall be constituted a Board of Health, and shall secure the services of some reputable physician to work with them. To the board power must be given to punish all who violate the sanitary laws of the Commonwealth, and to inspect all premises, etc. As the school directors are usually men of the best education in each district, and generally regarded as "lights," this would seem an excellent plan, and a long-neglected want would be supplied.

Following close upon the complaints made that the Philadelphia Hospital is so wretchedly overcrowded, comes the report of Dr. D. D. Richardson of the Norristown

State Hospital for the Insane, which shows that over 300 patients are compelled to sleep in the corridors for lack of accommodation. The damage which an epidemic would cause, should it break out in either institution, would be almost incalculable, but as with filtration and other city necessities our politicians seem to know little and care less for the responsibility attached to them. Instead of "the public be damned," it is a case of "the public may die—for all we care."

Dr. John V. Shoemaker, who has recently been appointed Surgeon-General of the State, was presented with a sword by the senior class of the Medico-Chirurgical College last week.

Dr. Edith A. Barker of the Delaware State Hospital has been elected Pathologist to the Norristown State Hospital for the Insane, and her former position has been filled by the election of Dr. Jean Wilson.

Dr. John H. W. Rhein has been appointed Neurologist to St. Agnes' Hospital.

At the annual meeting of the Philadelphia Academy of Surgery, held February 6th, the following officers were elected for the ensuing year: President, Dr. J. Ewing Mears; vice-presidents, Drs. W. W. Keen and John Ashhurst, Jr.; secretary, Dr. William J. Taylor; treasurer, Dr. William J. G. Porter.

Dr. Edward North of Hammonont was killed last Saturday while driving across the railroad tracks near his home. He was a graduate of Jefferson Medical College, a member of the Hammonont Board of Health, and of the Board of Education.

Dr. A. Clark Deakyne died February 5th of chronic Bright's disease. He was a graduate of the old Pennsylvania Medical College, which is no longer in existence.

The total number of deaths occurring in Philadelphia during the week ending February 11th, as reported at the Health Office, was 569, which is an increase of 57 over last week, and of 63 over the corresponding period of last year. Of this number 149 occurred among children under five years of age. The total number of new cases of contagious diseases was 444, reported as follows: Diphtheria, 70 cases, with 20 deaths; scarlet fever, 35 cases, with 2 deaths; typhoid fever, 339 cases, with 41 deaths.

MEDICAL MATTERS IN CHICAGO.

[From Our Special Correspondent.]

OSTEOPATHS—BILL AGAINST THE ISSUANCE OF UNLAWFUL DIPLOMAS—CONCERT FOR THE BENEFIT OF THE PRESBYTERIAN HOSPITAL—DONATION BY MRS. STICKNEY—EXAMINATIONS FOR INTERNES AT COOK COUNTY HOSPITAL—NEW SANATORIUM—CHICAGO LARYNGOLOGICAL AND CLIMATOLOGICAL SOCIETY—TREATMENT OF HEMORRHOIDS BY THE PLASTIC METHOD.

CHICAGO, February 12, 1899.

ACCORDING to the *Chicago Evening Post*, the osteopaths of Illinois are preparing a bill to be introduced in the General Assembly placing this school under the control of the State Board of Health, and providing that each applicant for a certificate to practise shall pass a satisfactory examination in anatomy, chemistry, gynecology,

obstetrics, pathology, bacteriology, and physiology. A section will be inserted in the bill providing that no osteopath shall administer any medicines, either externally or internally, and shall not perform surgical operations. It is believed the measure will meet the approval of the leading osteopaths of the State, and will then remove the objections which were set forth by Governor Tanner in his disapproval of the osteopath bill which was passed at the last session.

Dr. J. A. Eagan, secretary of the State Board of Health, is preparing a bill which provides that it shall be unlawful for any person or association to issue to any of its students or other persons any diplomas or other certificates of qualification in medicine, pharmacy or dentistry unless said person or association shall first obtain permission so to issue said certificate or diploma from the State Board of Health, the State Board of Pharmacy, or the State Board of Dentistry of the State. Violation of the law is punishable by a fine of from \$100 to \$1000. Another bill regulating the granting of charters to educational institutions provides that the Secretary of State shall not issue charters to persons or corporations for the purpose of conferring degrees, diplomas or other certificates of qualification in the science of medicine, pharmacy, or dentistry, unless the application therefor is approved by the State Board of Health, the State Board of Pharmacy, or the State Board of Dentistry, respectively. This bill also empowers the Secretary of State to revoke the charter of any institution of education upon the recommendation of either of these boards if the recommendation is accompanied by proof that the institution is conducting a fraudulent business. It is said, that these measures have the approval of Governor Tanner.

The fourth annual concert for the benefit of the Presbyterian Hospital was given Monday evening, January 23d. This hospital admits more than 2000 patients annually, requiring an annual expenditure of \$100,000. In addition to beds endowed by benevolent persons, it has no less than 65 free beds, and it is said to do more charity work than any other hospital with the exception of the Cook County.

The Elizabeth Hammond Stickney Memorial Building, erected for the nurses of St. Luke's Hospital, was dedicated January 26th. Mrs. Stickney bequeathed \$75,000 to the trustees of the hospital, of which \$10,000 was to endow a room in the name of her husband, Edward Stickney, a like sum to endow a room in her own name, and the balance, \$55,000, to be used in the erection of the Memorial Building for the Training School and for needed improvements in the hospital itself.

The medical profession of Chicago and of Cook County has been deeply stirred over the purpose of the President of the County Board of Commissioners to put examinations for internes at the County Hospital under the supervision of the Civil Service Board. The examinations heretofore have been conducted under the immediate supervision of the hospital staff of physicians and surgeons, who now take their stand conservatively on the ground that the past system has been most satisfactory and that a change which might put the work of examina-

tion into other and possibly less-competent hands is to be deprecated. The reasons for the change as advanced by President Irwin are that the hospital staff had been suspected of favoring the applicants from those colleges in which the staff physicians are interested. The one point which concerns the public in all this is, of course, the eminent necessity of maintaining the efficiency of the hospital forces unimpaired. Efficiency is the aim of the Civil Service Commission and the prime purpose of civil service law. If it be true that the hospital physicians have formed a sort of close corporation for the benefit of the particular colleges in which they are interested, the public has a right to know about it and to protest vigorously. But it is hardly likely that men of the rank and reputation of some members of the Cook County Hospital Staff are going to imperil the success of their own work and the strength of their own reputations by permitting the selection of incompetent internes.

One of the strongest arguments advanced for the continuance of the present system of examinations is that the staff of the Cook County Hospital gives its services to the people. To a very considerable extent the reputation of the individual physician is dependent upon the showing which he makes there. On the interne, more than on the attending physician, may depend the success of treatment. The examinations as now conducted are fair and impartial. There is no possibility for collusion. Of course politics is at the bottom of this and it has been the curse of the County Hospital during the last twelve or more years.

Architect R. T. Newberry of this city has prepared plans and specifications and has let excavation and foundation contracts for the Phelps Medical and Surgical Sanatorium to be erected at Battle Creek, Michigan. The building will be 200 by 200 feet and five stories high. It will be fireproof throughout and the outside walls will be built entirely of rough-filled boulders. The cost of the building, exclusive of furnishing, will be about \$200,000.

The Chicago Laryngological and Climatological Society was recently organized with Dr. E. Fletcher Ingals as its president and Dr. Melville T. Hardie, secretary. A committee was appointed to draft a constitution and by-laws.

At a meeting of the Chicago Medical Society, held February 1st, Dr. Henry T. Byford presented a paper on "The Treatment of Hemorrhoids by the Plastic Method." He has discarded the ligature in the treatment of hemorrhoids and merely cuts them off and sews the raw surfaces together with silkworm gut as in any plastic operation. Three or four wounds are thus sutured, a part of them in a diagonal or transverse direction, in order that the lumen of the anus may not be contracted. The bowels may be moved at the end of forty-eight hours and the sutures removed in two weeks. The rectum is douched out with plain water after every bowel movement. The essential features of the operation are: (1) the abandonment of the ligature; (2) the employment of silkworm-gut sutures, left long and tied into bundles to facilitate removal and to guide the douche point; (3) the diagonal or transverse direction of the line of suture; (4) keeping the stools liquid and the rectum douched out.

OUR LONDON LETTER.

[From Our Special Correspondent.]

PROGRESS OF THE CRUSADE AGAINST CONSUMPTION
—EXTRAORDINARY INSTANCE OF RENTING A MEDICAL DIPLOMA—A NEW PSYCHIATRIC DISEASE—
STEWED RATS AS A REMEDY FOR BALDNESS.

LONDON, February 4, 1899.

THE crusade against consumption has evidently come to stay. The newspapers are full of accounts of the methods of German sanatoria, of the classification of tuberculosis as an infectious disease, and last but not least, of the remarkable scheme of our own Nikola Tesla. The movement among the laity is on the whole strictly rational and scientific and there is a most refreshing absence of any trumpeting of sure-cures or wondrous methods of treatment. Fresh air and sunlight are the only remedies recognized and the community in its delight at waking up to find consumption curable, seems ready to support loyally every reasonable measure for the extermination of the disease. Five more county and municipal councils have taken the question seriously in hand this week. One melancholy and distrustful layman breaks the general chorus of hope and congratulations with a bitter complaint against doctors for changing their minds so suddenly as to the seriousness and fatality of consumption, like the man who would not be deprived of the precious doctrine of infant damnation. In the next breath he denounces them for not finding out long ago that consumption could be cured by such simple remedies as air and sunshine.

The comments upon Tesla's extraordinary scheme have been most shrewdly sceptical, the *Westminster Gazette* heading its announcement "Bacilli Killed While You Wait," while the asinine statement of Benedikt of Vienna, who has allowed himself to be interviewed upon the subject, that he anticipates great things from the method "because this is absolutely certain: that Mr. Tesla has succeeded in destroying the bacilli with these currents in his own laboratory," is ridiculed as it deserves to be.

The case of "Dr. Nugent," to which I alluded in my last letter turns out to be even more extraordinary than was suspected. It will be remembered that he was indicted for causing the death of a parturient woman, through failure to recognize an inversion of the uterus. No sooner was his examination begun than it was discovered that the prisoner's name was not "Nugent" at all, although he possessed a diploma and registry number in that name, and further investigation revealed a most remarkable state of affairs. The man's real name was proved to be Julian Rowland, a surgeon's dispensary assistant, and when some ten years ago one of his chiefs named Nugent went abroad, he conceived the brilliant scheme of *renting* his diploma and registry number. On the strength of this useful document he had gone to another part of London and conducted an active practice for eight years, regularly paying the munificent sum of *sixty-seven cents* per week to the wife of the real Dr. Nugent. It seems incredible that this Pinafore-like performance could have gone on for eight years under the very nose of the General Medical Council and the Medical De-

fence Union but it did. It seems that the representatives of the latter body had found out that Dr. Nugent had left England for more than two years and had had his name removed from the register. Then for some reason a delay occurred and Rowland rose to the emergency, posted over to Ireland with his "hired" qualifications, got them registered there, and when the Medical Defence pounced on him, smilingly displayed his Irish registry number and assured them that he was a totally different Dr. Nugent from the man who had gone abroad. However, "it's a long lane" and "Dr. Nugent" will now have abundance of time to "get up" his subjects for a genuine licentiate examination, as he has been awarded six-years' penal servitude—three years for manslaughter and three for perjury.

Another way of evading the Medical Practice Acts has also been revealed this week in connection with a malpractice suit. This was a "Medical Hall," which was opened by an enterprising chemist who made an arrangement with a qualified physician of the seedy stripe to "cover" his operations by signing his prescriptions and making the first visit to his patients. All went well in this particular establishment until the doctor got drunk and failed to recognize a senile pneumonia in an old woman whom his assistant went on treating for a cold until she rather suddenly died. This the family not unnaturally resented and insisted upon an inquest, when the whole precious arrangement came to light. As nothing particularly harmful had been done in the way of treatment no indictment was brought but the coroner severely denounced the "Hall" as a fraud upon the public and announced his intention of reporting it at once to the Medical Council for prosecution.

A curious result of recent "reform" legislation has just been reported. Last July a new Workmans' Compensation Act came into operation, practically compelling employers to fully compensate workmen or their relatives for any injury sustained in their employ. Its first result apparently has been to markedly increase the number of accidents and even of deaths in the occupations covered by it. As compared with the corresponding six months of 1897, there was an increase of twelve per cent. in the deaths and forty-three per cent. in non-fatal accidents. In factories alone the deaths increased from 250 to 350. No rational explanation of these alarming changes seems forthcoming, except that of increased carelessness born of certainty of compensation and pay for lost time, a carelessness which is, of course, most noticeable in slight accidents but which also may lead to serious ones.

Another new disease has just been discovered in the realm of psychiatry. It bears the ponderous name of *morbus eponymicus*, the "naming disease" or as its witty French discoverer calls it, "*syndrome de baptême*," the lunacy of baptism. Its principal symptom is an inveterate desire of naming something after oneself, a disease if possible, but if not, a symptom, a method, even an instrument. It is usually extremely chronic in its course but liable to acute exacerbations at intervals, usually in print.

A partial report has just been published of the work

upon which Professor Kanthack was engaged at the time of his much-lamented death. This was an investigation upon milk as a carrier of tuberculosis, by the ingenious method of inoculating guinea-pigs with doses of the milk itself. The alarming result was obtained that out of thirteen dairies tested the milk of nine caused tubercular developments in the pigs. The sediment obtained by centrifugalization was used for inoculation and the injection proved infective in a number of cases in which no bacilli could be discovered by previous microscopic examination. The reporters think that the test is sufficiently delicate to be of value as a substitute for the use of tuberculin, or at least to be a valuable precedent to this.

A sovereign remedy for baldness has just been made public by a Chinese sage, and that is stewed rats. He is so confident of the beneficial effects of this delicacy upon the glossiness of the pig-tail that he epigrammatically asserts that "a rat is to the human hair what a carrot is to a horse's coat." I fear that most of those who read this revelation will be likely to exclaim "Rats!" in tones of horror—or scepticism, according to their bent, but the proof of the pudding is in the eating, and until this attractive remedy has been thoroughly tried *a la* Brown-Séquards' fluid, cerebrine, *et al*, we have no right to condemn it on *a priori* grounds. Rats are eminently hairy animals and can live to a great age without becoming bald, so why should they not furnish an antialopepic serum or antitoxin of the alleged microbe of baldness?

Another victory has just been scored by the "biologists" in sewage disposal over the chemists. The sanitary authorities of Manchester, after several years' trial of elaborate chemical methods of treating the city sewage, have decided to change to the "soil" or "bacterial" system. No method of treatment has yet been found either so effective, so free from odors, and in the long run, so economical, although the initial cost of the land and its drainage is somewhat heavy. We are so often called upon to denounce and fight against bacteria that it ought to give us peculiar pleasure to recognize their invaluable services to mankind as well.

The building of the new London Polyclinic and Graduates' College is being rapidly fitted up, the resident medical superintendent has taken up his quarters in it, and the clinics and lectures will begin next week.

Medicine is steadily winning recognition as a science and a science of great public value and interest. Dr. Alan Macfadyen, the Director of the Jenner Institute of Preventive Medicine, has been appointed to give a series of lectures upon "Toxins and Antitoxins" in the public winter course at the Royal Institute, in company with such men as Sir Robert Ball, Ray Lankester, and Lord Kelvin.

A curious cause of overpressure has just been brought to light by a public letter of Lord Rothschild. The Jewish children in London are not only keen and industrious pupils in the public schools but are also urged by their parents and rabbi to attend their devotional schools or chedarim for the purpose of religious instruction as well. These are held in the early morning and at night, and as this service of both God and Mammon results in the poor

children being in school from 7 A.M. to 9 P.M., it is little wonder that complaints of overwork are being heard on all sides. Several prominent Jewish physicians have united in a protest against the senseless system which they declare is already causing physical deterioration in the children, and Baron Rothschild adds his influence to the protest.

It really looks as if London were about to secure an adequate and needed ideal system of water-supply at last. The bitter lesson of last summer and autumn's water-famine has been taken deeply to heart by the London County Council, or "L. C. C." as it is usually styled with American abbreviativeness and negotiations are on foot for the purchase of a whole river valley and water-slopes in the Welsh Mountains, where enormous and practically inexhaustible reservoirs can be constructed whose slopes can be absolutely controlled and protected from all possible pollution.

TRANSACTIONS OF FOREIGN SOCIETIES.

French.

CHOICE OF AN ANTISEPTIC IN CERVICAL DISCHARGE—MODE OF ACTION OF SALINE INJECTIONS IN INFECTIONS—LITTLE TUBERCULOSIS IN THE FRENCH ARMY—URETERO-PYELOSTOMY—ARTERIOSCLEROSIS TREATED BY THYROID EXTRACT—LYMPHATIC TUMORS OF THE SCROTUM CAUSED BY FILARIA—A POINT IN THE SUCCESSFUL CLOSURE OF A FECAL FISTULA—TUBERCULOSIS OF THE TESTICLE—ACUTE LEUCEMIA—AFFECTION OF THE SUPRARENALS NOT ADDISON'S DISEASE—SWEDISH GYMNASTICS IN CONGESTIVE HEADACHE AND INTELLECTUAL FATIGUE.

AT the Therapeutic Society, December 14th, BLONDEL spoke of the choice of an antiseptic to combat cervical discharges. After trying all of the usual substances he became convinced that it is the evacuation of the microbes which is all important, the nature of the fluid employed being of secondary importance. In practice he douches the uterus five minutes or so with a solution of bicarbonate of soda. Then he compresses the cervix between the valves of a speculum, so as to express the secretions of the cervical glands. After that the douche is continued. The evacuation of microbes being thus assured, the excessive uterine discharge is done away with for two or three weeks.

BARDET discussed the mode of action in large injections of saline solutions for relief of infection. All the toxins which develop in the body and affect other organs or tissues may be looked upon as soluble. They may either be diffusible, in which case they do not become attached to the tissues, and are easily eliminated, or they may on the contrary adhere to the tissues and modify them more or less profoundly. The favorable action of large saline injections is in part due to the reestablishment of blood tension and in part to the dilution, mobilization, and elimination of the toxins which are non-adherent to the tissues. If the toxins are firmly adherent to the tissues the saline injections have little effect.

BOVET said that saline solution to produce any appre-

diable elimination of the toxins in severe cases must be administered in large quantities, two quarts or more during twenty-four hours. By increasing the blood pressure and facilitating diuresis the saline injections reestablish the chloruria, and not until then do the general symptoms improve sufficiently to make good the hope of a speedy cure. These results are due to chlorid of sodium, which although not properly speaking a solvent of the toxins, is capable, nevertheless, of producing marked changes in the blood-serum.

KELSCH presented to the Academy of Medicine, December 27th, the results of his experiments with the dust of barracks. He found it difficult to produce tuberculosis in guinea-pigs by injecting the filth from spittoons into their peritoneal cavities. One-third of 122 animals thus treated died of acute infections, some were killed and examined, with a negative result, while the rest remained in perfect health. Of 91 animals inoculated with nasal mucus, only one succumbed to tuberculosis. This mucus came from a cuirassier in apparently perfect health. Either there were no tubercle bacilli in these materials or if present they were not of sufficient power to triumph over an animal belonging to a species peculiarly susceptible to the disease.

DELBET reported the case of a young woman who had suffered from pains in the left lumbar region since the age of eighteen years. Two pregnancies and one miscarriage in the third decade of her life increased her symptoms. When seen by the speaker in her thirty-third year there was a well-marked left hydronephrosis. The right kidney, as shown by catheterization, was normal in action. The left kidney was exposed and found to contain a quantity of odorless fluid, but no calculus. The upper portion of the ureter was the seat of a very tight constriction. It was followed downward by a tedious dissection, opened below the stricture, and proved to be pervious from this point to the bladder by the passage of a probe from above downward. By a ureteropyelostomy an outlet for urine one-third of an inch in diameter was provided. The patient recovered.

LANCEREAUX showed two patients at the meeting of January 3d. One was a young woman who had a generalized arteriosclerosis, and the other a man affected with chronic rheumatism, gout, and arteriosclerosis. These patients had received gradually increasing doses of iodothylin, beginning with .5 grams (8 grains), and gradually increasing until 3 grams (45 grains), were taken each day. The condition of the woman had improved rapidly, and after four months of treatment her face had resumed its normal aspect, and the trunk, neck, and arms, had become supple so that she could again sew without trouble. The man meanwhile had lost his articular pains, and the osteophytes and the trophic disturbances of the nails had disappeared. There was also less arterial tension, micturition at night had become less frequent, and the urine contained less albumin than formerly. The peripheral arteries had to a certain extent recovered their natural suppleness.

At the Session of January 10th, FRANCK spoke of the dangers attending the administration of extracts of the

thyroid gland under conditions in which the gland was normal, for instance, in simple obesity. One ought not to forget that this substance is extremely poisonous, and capable of producing coma, and even death by cardiac collapse. In view of these facts the sale of articles containing thyroid extracts ought to be permitted only upon the order of a physician.

At the Surgical Society, December 21st, LE DENTU spoke of cases of adenolymphocoele and lymphadenoma of the groin which could be diagnosed only with difficulty from an omental hernia. He had recently removed lymph varices from the scrotum and had observed a profuse lymphorrhagia to follow. There were filaria in the blood of this patient, as well as in that of the patient who had the inguinal adenolymphocoele.

TILLAUX and RECLUS mentioned cases of filariasis of the scrotum simulating hernia which they had treated by ablation of a part of the scrotum, following in so doing the custom in tropical countries. The results were excellent.

At the Session of December 28th, LEJARS showed a girl, aged fourteen years, upon whom many unsuccessful operations had been performed in order to close a fecal fistula of many years' duration. He had finally accomplished this at the second attempt by dissecting out the whole fistulous tract. He found that the artificial anus opened into a large pouch connected with the sigmoid flexure. The opening was closed, and a lateral anastomosis established, the cure being complete. The fecal fistula had been made two days after birth, the child having imperforate anus. Two years later the anus was successfully opened but the fistula persisted as stated.

MONOD related a failure to close permanently a fecal fistula. He attributed his nonsuccess to the incomplete dissection of the fistulous tract.

REYNIER reported a case of tuberculosis of the testis in which the vas deferens was followed up by a reflection of the peritoneum until it could be divided at a distance of only six centimeters (2.5 inches) from the prostate. Its tissue was here unaffected by the disease. Tuberculosis of the testicle has sometimes been unwisely regarded as benign and treated accordingly by imperfect operations. Even in the mildest case the disease may spread to the lungs and cause death. The presence of tuberculosis of the prostate, on the other hand, is no adequate reason for refusing to remove a tubercular testicle, since clinical results show the advantages of such removal and complete cure may take place even though the prostate is involved. From the palliative operations, such as curetting and epididymectomy, Lejars had seen little benefit. The former is readily followed by recurrence and the latter by abscess.

GILBERT and WEIL reported to the Biological Society, December 24th, three cases of acute leucemia, which developed in three months, five weeks, and two weeks respectively. The first of these patients had symptoms similar to those of chronic leucemia, but one of the other two was more like an infectious stomatitis, with spleen and glands enlarged, and the third simulated purpura. In acute leucemia there is an irregularly elevated tempera-

ture with intense anemia and hemorrhages. The onset and course of the disease may be stormy and rapid. In doubtful cases an examination of stained specimens of the blood should always be made. The changes noted by Fraenkel will almost always be found. The red cells have a tendency to assume in a short time the changes of pernicious anemia, and the polynuclear white cells are much reduced in number or altogether absent. The mononuclear white cells, especially the large ones, are increased. They may, indeed, be the only leucocytes which are found in the blood. The eosinophilic cells are not modified.

SERGEANT and BERNARD reported that they had attended a man who died with all the signs of acute poisoning. At the autopsy no lesion was found to account for his death, except a complete caseation of both suprarenal capsules. The pathology of these bodies ought to be extended so as to include this and analogous cases which certainly cannot be classed with cases of Addison's disease, in which the chief symptom is melanoderma.

At the Medical Society of the Hospitals, January 6th, MERKLEN presented a man who for some weeks had experienced intolerable pains in the epigastric region in the form of crises which were brought about by the ingestion of the simplest food, or by walking, or even by standing in the erect position. After fourteen-months' treatment, during which time a great number of remedies were employed without the least effect, a laparotomy was performed. There were found many adhesions from the stomach to the anterior abdominal wall, as well as to the neighboring organs. These were all divided except one which extended from the cardiac end of the stomach to the liver. In the middle of the lesser curvature of the stomach there was an induration, which suggested an ulceration. The patient was relieved of his pains by this operation so far as they were caused by peristaltic motions, but they were still produced by walking and by the erect position. A second operation was, therefore, performed, and the ulceration was excised. The pains immediately disappeared and did not recur.

HAYEM said that it is not always safe to make a diagnosis of perigastritis from the continuance of pain as this symptom might be due to the ulcer alone. A more reliable sign seemed to him to be the immobility of the stomach. The normal stomach moves with changes in the amount of its contents, but in perigastritis with adhesions its motions are limited or altogether absent.

MATHIEU said that the diagnosis might be rendered still more difficult by the growth of a cancer in the site of the ulceration. He showed several fragments of cancer tissue which had been expelled with vomited material from a patient who presented all the signs of gastric carcinoma. The microscopic examination of these fragments showed that the tumor was an epithelioma made up of cylindrical cells.

At the Medical and Surgical Society of Bordeaux, December 23d, TISSIE spoke of the value of Swedish gymnastics in congestive headache and intellectual fatigue as experienced by himself while recently in Sweden on a Government errand. One of the characteristics of the

Swedish massage, is the application of the treatment at the terminations of the nerves affected, *e.g.*, the supra-orbital or infra-orbital. Vibrations, either made with the hands or with a mechanical vibrator, are usually employed, and have a sedatory influence. They are accompanied by massage of the muscles which terminate in the vicinity of the nerve endings. The length of the treatment depends on the condition of the patient. TISSIE made a distinction between those patients whose recuperative powers are good, and those who are neurasthenic and have inherited fatigue. In both classes of patients, the treatment produces repose but in the former class the repose is followed by a speedy reparation of the vital forces, which in the latter class takes place slowly. The massage is preceded and followed by movements, chiefly respiratory, which are designed to relieve cerebral congestion. He adapted this treatment in his own practice and was gratified by the good results which he obtained.

SOCIETY PROCEEDINGS.

NEW YORK ACADEMY OF MEDICINE.—SECTION ON SURGERY.

Stated Meeting, Held Monday, January 9, 1899.

W. W. VAN ARSDALE, M.D., in the Chair.

GENERAL PERITONITIS TREATED BY ENTEROTOMY.

DR. H. LILIENTHAL: I have two patients here this evening who illustrate a method which I have been employing in the treatment of general peritonitis accompanied by great distention. The distention in general peritonitis is a symptom which causes very great discomfort on account of its mechanical effect upon respiration and the obstination to which it gives rise, and it is also attended by danger and may indirectly be the cause of death. For these reasons it is imperative that it should be relieved, and it seems to me that this is best done by opening the intestine by incision, in order to evacuate the gas and septic fluid. Puncture alone is not likely to be followed by success. A longitudinal incision should be made in the gut at a point furthest away from the mesentery, and the patient should then be turned a little on the side in order that gravity may assist in forcing out the gas and septic contents of the gut. The incision is then closed by sutures of fine silk and another coil of intestine pulled out of the wound and treated in the same way. This should be repeated until the gut is perfectly flaccid.

This boy is eight years of age and was admitted to the hospital July 23, 1898. Although he had been ill but four days he was profoundly septic, and in a semicomatose condition. The abdomen was greatly distended, was painful on pressure, particularly on the right side, and the pupils were dilated. There had been no movement of the bowels in two days in spite of the administration of castor-oil and similar household remedies. The prognosis seemed very bad indeed. I first saw him at eight o'clock in the evening, and I operated upon him before midnight. A large quantity of foul-smelling serum was found in the abdominal cavity, and there were many

adhesions about the appendix. The latter, which appeared to be gangrenous, was removed, and the adhesions broken up. The boy's condition was so low that it was feared he would die upon the table, but it was thought best to prolong the operation in order to relieve the distention and thus give a better chance for recovery. Therefore, the three incisions were made in the bowel, a large quantity of gas and fluid escaped, and the incisions were closed with two or three silk sutures. A drain, such as is recommended by Dr. Morris, consisting of gauze surrounded by rubber tissue, was then carried down into the pelvis and allowed to protrude through the abdominal wound, which was held open by superficial gauze dressing. This drain was removed on the third day, and replaced by a filament of gauze. Secondary suture was performed two weeks after the operation. It is interesting to note that cultures taken from the appendix and from the fluid which escaped upon opening the abdomen were found to contain colon bacilli only.

I performed the same operation upon this man on May 5, 1898. His condition at that time was extremely bad although he had been sick but two days. His pulse was small and irregular, there was constant vomiting, and he presented the typical picture of acute sepsis. The abdomen was extremely tympanitic, palpation caused great pain, and there was edema of the abdominal wall at all points. Upon opening the abdomen a large quantity of seropurulent fluid escaped. A very large and gangrenous appendix was removed and the intestines were opened by four incisions. Recovery was uneventful. Cultures taken from the appendix showed the colon bacillus only, but those taken from the pelvic cavity showed, in addition, the micrococcus pyogenes albus.

DR. R. H. M. DAWBARN: I would like to ask Dr. Lillenthal whether, in his judgment, benefit would be derived from injecting into the bowel a saturated solution of Epsom salts, as suggested by Dr. McCosh, in cases of paralysis and distention of the bowel. I would also like to ask if any of the gentlemen present have had any experience with the subcutaneous injection of Epsom salts as a means of causing a movement of the bowels.

DR. R. T. MORRIS: I have practised incision of the bowel but so far have made but a single opening. I think, however, that recovery would have been more rapid in some of my cases had I made several incisions. The gas does not always escape as freely as one would expect when the gut is incised, and I have gone so far as to stitch the ileum to the abdominal wall, thereby risking the danger of a bad angle later on in order that the gas might escape during the day and night following the incision of the intestine with the expectation of closing the fistula later which, however, was not necessary as it closed spontaneously. Of late years I have been making my abdominal incision smaller and smaller, and now rarely make one longer than three inches. I do not leave the wound open, but close it carefully, layer by layer.

I would like to hear more about injecting Epsom salts. I have always considered that the reason for administering this drug is because of its hydroscopic nature, which causes a rapid exosmosis of serum and toxin-bearing fluids

from the infiltrated tissues into the bowel from whence they are discharged. If this is not the whole *rationalité* of it, I would like to know it.

I would like to mention a little procedure which Dr. Lillenthal may find of service in these cases, and that is stretching of the sphincter ani. Patients with general peritonitis have great difficulty in emptying the bowel even after a large injection. This will be more easily accomplished after dilatation of the sphincter muscle.

DR. JOHN A. WYETH: The treatment by incision into a bowel which is paralyzed as a result of septic peritonitis is so logical that it is strange that it is not more generally employed. It has occasionally been practised by individuals in this city during the last ten years but has never become popular. Paralysis of the bowel, it seems to me, is due to two causes; one external, and the other internal, both of which are the result of the peritonitis. The first is the plastic lymph which is rapidly deposited upon the external wall of the intestines; the other is the hyperdistention within the bowel due to an accumulation of gas or fluid. The latter is relieved by multiple incision of the gut. My experience has taught me that a single incision does very little good.

DR. FREDERICK LANGE: This subject is of so much importance that I do not think we should arrive at conclusions too hastily. In the first place, no proof has been submitted to show that the two patients presented this evening really had general peritonitis, or that they were septic. Nothing has been said about the pulse and temperature, and there is nothing in the history of the cases which would lead one to consider them cases of general peritonitis. I inferred from Dr. Lillenthal's remarks that he would have us believe that a collapsed gut will absorb less than a distended gut. Theoretically, I do not think this is the case. The subject is interesting, however, and opens up a new field for experimental investigation. My experience in the treatment of general peritonitis has been very discouraging. I have had patients suffering from extensive pelvic suppuration whom I have treated by operation and a limited number have recovered. I am not prepared to say that the peritonitis was general, that it extended to the diaphragm and on the upper surface of the liver. A septic peritonitis which is confined to a limited area will sometimes give rise to the most severe symptoms, and may even cause death. Much, too, depends upon the nature of the infecting poison. Personally, I have not had good results from incision of the bowel for the relief of distention in general peritonitis.

DR. CARL BECK: My views are similar to those of the last speaker. I think that all cases in which recovery is said to have followed general peritonitis were really cases of circumscribed peritonitis. In regard to the operation under discussion I might say that I am in favor of a single incision.

DR. A. E. GALLANT: I think the term intestinal paralysis is a misnomer when applied to these cases. I once saw a post-operative case in which there was so much distention that the woman's waist, which originally measured twenty inches, measured forty-eight; the abdominal wall was so thin that it was possible to see the

peristaltic action of the bowels, therefore, it is wrong to call such a condition a paralysis of the intestine. The distention in this case was relieved by simply rubbing the abdomen in the manner described by me some five years ago.

DR. DAWBARN: Dr. Morris has spoken of the prevailing tendency to make the abdominal incision smaller than was formerly done. In this connection I cannot deprecate too strongly the custom of making a large incision in cases of general peritonitis for the purpose of turning the intestines out of the abdomen and irrigating the cavity. It is impossible to remove every bit of pus from the abdominal cavity by irrigation. To prove this to my own satisfaction I poured a gobletful of milk into the pelvic cavity of a cadaver, then irrigated the cavity until the water returned perfectly clear, and sponged it out dry, yet, when the abdomen was opened several drams of milk were found among the folds of the mesentery. On another occasion I repeated the experiment, using pus instead of milk.

DR. W. W. VAN ARSDALE: I have devoted considerable thought to this subject and I think there are some points connected with it which have not been mentioned. Further studies should be made in regard to absorption in the abdominal cavity. There seems to be no doubt that the absorption which causes most danger to life is that which goes on in the center of the diaphragm and above the liver. If the peritonitis reaches this point there is no way of saving life. If other portions of the abdominal contents are the seat of the inflammation a cure can be effected. If the peritonitis is of the fibrinous kind there is more hope for the patient. If the intestines are distended by general paresis there is less space in the abdomen and, consequently, more pressure; moreover, fluids run up under the diaphragm and spread infection. If we reduce this distention by opening the intestine the result will be more space, less pressure, and less absorption. By keeping the wound in the intestine open continuous drainage may be secured which changes the current of lymph and has a beneficial effect. I have lately been pursuing this method.

In regard to the objection raised against incision of the intestine, to the effect that it is difficult to thoroughly empty the bowel even after incision is made, this will be facilitated by saline irrigation of the bowel at the time of the operation. The procedure is undoubtedly of value and should be more generally employed. A systematic application of the principles involved will throw additional light upon the subject.

DR. LILIENTHAL, in closing: In regard to Dr. Dawbarn's remarks concerning irrigation of the abdominal cavity I agree with him that it is not possible to thoroughly cleanse it and I do not think it should be attempted.

Stretching of the sphincter ani was referred to by Dr. Morris. In my cases I have introduced a rectal tube which has been left in for hours at a time and which answers the purpose even better than stretching the anus.

As to whether the cases reported were or were not cases of general peritonitis, of course I do not know

whether every square millimeter of the peritoneum was affected, nor do I care, but I do know that the patients were suffering from what is known as general peritonitis, so far as it is possible to make that diagnosis without an autopsy. I am sure that Dr. Lange would have made the same diagnosis had he seen the patients both before and at the time of operation.

I have never used Epsom salts in these cases. If the effect of this drug is merely hydroscolp, I would suggest that glycerin would act as well.

TWO UNUSUAL CASES OF ANEURISM.

DR. CARL BECK: This is a case of aortic aneurism. The patient is thirty-nine years of age, German by birth, and gives the following history: His father died suddenly at the age of sixty-five years; his mother also died suddenly at the age of sixty. He denies syphilis, and examination shows no evidences of the disease. There is no history of gout or chronic nephritis. He states that about five years ago, while lifting a heavy weight, he felt pain in the left side of the neck, and a small protuberance appeared there. He entered a hospital and was treated for torticollis, and eighteen months ago returned to the hospital to be treated for malarial fever. At this time the tumor was not larger than a good-sized apple. On September 21, 1898, when the patient was admitted to St. Mark's Hospital, the transverse diameter of the tumor was $7\frac{1}{2}$ inches, and it was found that the sternum had almost entirely disappeared as a result of pressure, as shown in these skiagrams. In spite of the enormous size of the tumor at the present time there is but little pulsation to be felt. This is probably due to the fact that the aneurismal sac is filled with fibrinous clots. Resonance is very marked. It is also interesting to note that the radial pulse on the right side is a little stronger than that on the left. The patient's lungs are normal. Following the advice of the French physicians, we have been giving this man large doses of gelatin, which has a tendency to coagulate the blood, and it would seem that the tumor is becoming smaller and harder. The condition of the patient is remarkable; he goes about and attends to his business just as if he did not have an aortic aneurism, and his hoarseness, which was due to pressure paralysis, has almost entirely disappeared.

I regret that I am unable to show you the patient from whom I removed this specimen, but he is confined to his bed by an attack of pneumonia which is probably due to embolism. Four weeks ago I removed this femoral aneurism from a man sixty-nine years of age. It is of the fibrinous class and shows very clearly the circulatory canals. The patient states that three years ago he received a slight injury of the thigh, but paid little attention to it. It caused him no trouble until three months ago when he noticed a tumor the size of a lemon at about the middle of the thigh at the point of injury. The tumor increased rapidly in size and as there was slight fluctuation it was thought to be an abscess and incision was seriously considered. Fortunately, this was not attempted. When I saw the patient, five weeks ago, I found a large tumor of an ovoid shape extending from the internal con-

dyle of the femur to the groin. It was very hard and no fluctuation could be detected. The leg and foot were absolutely normal. At first I thought it was an osteosarcoma, its hardness, slow growth, and immobility being in favor of that assumption. Two exploratory incisions were made and the tumor found to contain blood, examination of which showed an abundance of leucocytes. A skiagram showed the femur to be normal, therefore osteosarcoma was eliminated. The tumor was then thought to be a sarcoma of the sheath of the femoral vein and operation was undertaken. A gush of blood followed division of the tissues and examination showed the abnormality to be an aneurism in the internal fossa. Forcible pressure was made to control hemorrhage until the femoral artery was ligated at Scarpa's triangle. The sac was then dissected out with ease.

DR. WYETH: The cases are very interesting to me because of the fact that I have devoted so much time to the study of aneurism. I would suggest that in the future management of the first case a method be employed which I have tried in a case of this kind which was near the breaking-point, the aneurism having eaten its way through the thoracic wall. I boiled a lot of silver hare-lip pins and thrust them into the aneurism as if it were a pin-cushion, employing twenty or thirty of them and leaving them in the tumor eighteen hours. This procedure was repeated, the pins being left in thirty-six hours, and the result was that there was a perceptible effect in the way of thickening of the sac-wall. Under this mechanical effect the patient improved rapidly and the tumor went down to the level of the chest-wall. The man died two years later as a result of cerebral apoplexy. I think Dr. Beck would be justified in employing this method in his case as the tumor seems to be on the point of breaking through.

DR. DAWBARN: I had the pleasure of assisting Dr. Wyeth in the case to which he has referred. The method employed was suggested by McEwen of Glasgow. I think that in the case under discussion Dr. Beck should resort to either this procedure or to that which consists of introducing into the aneurism one or two meters of very fine piano-wire in such a manner that it will recoil upon itself in the sac, and passing through it a galvanic current, the positive pole being directed to the interior of the aneurism and the negative to the patient's back. The application should last half an hour and the end of the wire should then be tucked into the sac and left there. The administration of gelatin should be continued and I would suggest that large doses of iodid of potassium be added to the treatment.

DR. BECK: We have been giving the patient gelatin during the past six weeks, apparently with good results and it will be continued. I am very grateful for the suggestions which have been offered and later on will employ the method referred to by Dr. Wyeth; whose skill in the treatment of these cases is so well known.

DR. E. M. FOOTE then read the paper of the evening:

INGROWING TOE-NAIL; A COMPARISON OF METHODS OF OPERATION.

(see page 200)

DR. CHARLES N. DOWD: The author should be congratulated upon having devised a method which promises well. It is a modification of the operation of Anger, the essential feature of which is the removal of the matrix. This operator did not use cocaine, and was, therefore, obliged to work very rapidly and imperfectly, so that his method has been improved by the surgeons who have modified it. I have been performing an operation which differs very little from that suggested in the paper, except that it takes away a little more of the tissue. I have not seen the deformity he refers to as a result of removing too much of the toe, but I am inclined to think his method the better one. It certainly removes the matrix of the nail and this is the essential principle. It should be dissected away almost down to the bone, and if this is done one can be sure there will be no recurrence. It is moreover a most simple method.

DR. ERDMANN: I have been employing a method very similar to the one described by the author, but during the last three years I have omitted the sutures, merely bandaging the toe when applying the dressing, and have not seen any trouble follow this simplification of the operation.

DR. DAWBARN: During the last ten years I have been performing a little operation which has proved so satisfactory to me that I have ceased to experiment with other methods. I make two incisions, which form flaps and, after removing the ulcerated and septic tissue, these are brought together and held in place by one silkworm-gut suture which extends across the nail and is removed on the tenth day. The important point is to remove the root of the nail. I have demonstrated the fact that it extends to within one-tenth of an inch of the joint. I remove but a very narrow strip of the nail—not more than one-tenth of it.

DR. TOUSEY: I have operated in at least three hundred cases of ingrowing toe-nail and have successfully employed a modification of an operation, a description of which I published some years ago. I do not use hemostatic forceps, but a very firm bandage. On the second day after the operation I soak the bandaged toe for half an hour to loosen the iodoform-gauze packing in the wound and then apply a Thiersch graft taken from the arm. I never take a graft from the leg, especially if the patient is a woman, for I regard all women as possible candidates for ulcer of the leg. I think surgeons should be warned against taking away too little tissue. Nor does it seem to me essential to make the nail narrow.

DR. W. W. VAN ARSDALE: I will admit that I have had trouble in operating in these cases but it has been because it is difficult to do any plastic work in dispensary practice in which these patients are usually seen. It is impossible to keep them off their feet during the process of healing. I have derived the most satisfaction from an operation which, I believe, is to be attributed to Hamilton and which I first saw performed by Dr. Wyeth. It consists in removing the entire matrix, scraping the periosteum from the bone, and closing the flaps made by the incision. All operators agree that the entire matrix should be removed in order to make the operation suc-

cessful. In the past it was my habit to remove one-half of the nail, but I found that within six months the patient would come back with ingrowing toe-nail on the other side.

DR. FOOTE, in closing: I hesitate to say that this operation was never performed before I did it, because so many operations have been devised for the cure of ingrowing toe-nail that one cannot be familiar with them all. In regard to the distance of the matrix from the joint, this was stated in the paper as being one-fourth of an inch. As to a narrow nail causing as much trouble as a wide one, the width of the nail is not a factor in giving rise to this deformity. The curve of the nail is the cause of the trouble.

REVIEWS.

ON CARDIAC FAILURE, AND ITS TREATMENT; with Especial Reference to the Use of Baths and Exercise. By ALEXANDER MORISON, M.D., F.R.C.P., London: The Rebman Publishing Company, Ltd., 1898.

THIS book is well worth careful perusal. It is a serious endeavor to consider the treatment of chronic cardiac affections on scientific principles.

The book is divided into four parts; the first deals with the diagnosis and symptomatology of cardiac failure; the second considers the neuromuscular and hemic factors in disease of the heart and their bearing upon prognosis and treatment; the third deals with the general treatment of cardiac failure, and the fourth with the treatment by baths and exercise. A valuable appendix by Dr. Groedel of Bad Nauheim on the baths and exercises there employed completes the work.

Each division is carefully and studiously considered and perhaps with more detail than is necessary for a work of this character. This, of course, is not a fault, but, as the work will be read by trained physicians, it compels them to go over a mass of elementary material which should be relegated to works on physiology and physical diagnosis.

It seems to the reviewer that too much importance is placed on the use of the sphygmograms in the diagnosis of various intracardiac conditions. It is fairly well known that various sphygmograms may be obtained even with most accurate and reliable sphygmographs from the same case of cardiac disease within the space of a few minutes. It would, therefore, be unsafe to predict from sphygmographic tracings with any degree of assurance the character of the changes which the heart might undergo during treatment.

There can be no doubt that the chapters devoted to the general balneological and gymnastic treatment are deserving of all praise, containing as they do one of the best reviews of these subjects in the English language.

A CLINICAL MANUAL OF SKIN DISEASES. By W. A. HARDAWAY, A.M., M.D. Second edition. Philadelphia and New York: Lea Brothers & Co., 1898.

IN this new edition of Dr. Hardaway's book the text is completely rearranged and to a large extent entirely re-

written. The reader's admiration will be evoked by the skill with which the author has condensed within comparatively narrow limits so complete an account of the science of dermatology not less than by the impartial character of his judgment in all matters of controversy and by the thoroughly scientific spirit that pervades the whole work.

In estimating the value of a text-book on skin diseases the dermatologist will turn naturally to the chapter on eczema. A perusal of the seventy pages devoted to this subject in Dr. Hardaway's book will leave little to criticise and much to praise. That the book is thoroughly up to date may be inferred from the fact that even such recent subjects as Rixford and Gilchrist's remarkable cases of protozoon infection of the skin and Pollitzer's interesting views on xanthoma are sufficiently discussed. We congratulate the author on the marked success he has achieved and bespeak for the book the recognition which it merits.

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Aquæ	3 x.

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For Essential Pruritus.—

℞ Ammonii valerianat.	gr. xv
Syr. simplicis	3 v
Aq. menthæ piper.	3 iv.

M. Sig. Two to four teaspoonfuls daily.

For Ovarian Neuralgia.—

℞ Ext. belladonnæ	gr. iv
Ext. stramonii	gr. v
Lactophenin	3 iss.

M. Ft. pil. No. XX. Sig. Two or three pills a day.—*Martin.*

Application for Fissure of the Tongue.—

℞ Ac. carbolic	m. xii
Tinct. iodi	m. xl
Glycerini	3 ii.

M. Sig. External use.

For Painful Burns, Fissures, or Ulcers.—

℞ Orthoform	3 ss-3 i.
Vaselini	gr. lxxx
Lanolini	3 ss.

M. Ft. unguentum. Sig. External use.

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“Dr. R—, of Brooklyn, writes under date of Feb. 4th, 1899, as follows:

A marantic looking child was brought to me for treatment recently. Its cries were weak and constant; discharges from the bowels, foul, slimy and frequent. As the mother had lost her milk, the child's state seemed hopeless, but efforts were made to restore health and as food was the primal question, **ESKAY'S ALBUMENIZED FOOD** was selected.

The result was successful. The child's cries ceased, it began to sleep, the bowels after being cleansed began to move properly, the pinched face became rounded, and in the interval of three weeks, it was restored to health. Even an umbilical hernia present, owing to the increased action of health and other proper treatment, has almost been reduced to such a size as to leave hope for a speedy cure.”

If Not You Certainly Should Try It.

Free samples furnished upon application to

SMITH, KLINE & FRENCH CO., Manufacturers, Philadelphia, Pa.

RELIABLE MEDICAL SUGGESTIONS

How to Treat a Cough

In an able article under the above heading in the *New York Medical Journal*, Edwin Geer, M. D., Physician in Charge of the City Hospital Dispensary; also Physician in Chief, Outdoor Department, Maryland Maternite Hospital, Baltimore, writes:

“The object of this brief paper is not to try to teach my colleagues how to treat a cough, but simply to state how I do it, what good results I get, and to call their attention to those lighter affections of the throat and chest the principle symptom of which is an annoying cough, for which alone we are often consulted. The patient may fear an approaching pneumonia, or be anxious because of a bad family history, or the cough may cause loss of sleep and detention from business. What shall we do for these coughs? It has been my custom for some time to treat each of the conditions after this general plan: If constipation is present, which is generally the case, I find that small doses of calomel and soda open the bowels freely, and if they do not, I follow them with a saline purgative; then I give the following:

R Antikamnia and Codeine Tablets, No. xx

Sig.—One tablet once every four hours.

“The above tablet contains four grains and three-quarters of antikamnia and a quarter of a grain of sulphate of codeine, and is given for the following reasons: The antikamnia has a marked influence over any febrile action, restores natural activity to the skin, and effectually controls any nervous element which may be in the case. The action of the codeine is equally beneficial, and in some respects enforces the action of its associate. The physiological action of codeine is known to be peculiar, in that it does not arrest secretion in the respiratory or intestinal tract, while it has marked power to control inflammation and irritation. It is not to be compared with morphine, which increases the dryness of the throat, thus often aggravating the condition, while its constipating effect is especially undesirable.”

For Dysmenorrhoea

R Antikamnia Tablets, Five Grains Each.....No. xii

Sig.—Take two tablets, crushed, at beginning of menses and one every 3 or 4 hours till relieved.

Are You in Pain?

You will probably ask this question more frequently than any other. Nothing appeals to one more strongly. To be able to relieve pain, whether it be a slight nervous headache or the most excruciating suffering from a severe neuralgia, brings the height of pleasure to both patient and attendant.

The ideal remedy must not only do its work, but it must also do it quickly. Touching this point is an article in the *Boston Medical and Surgical Reporter*, by Hugo Engel, A. M., M. D. The author says:

“Antikamnia has become a favorite with many members of the profession. It is very reliable in all kinds of pain, and as quickly acting as a hypodermic injection of morphia. It is used only internally. To stop pain one five-grain tablet (crushed) is administered at once; ten minutes later the same dose is repeated, and if necessary, a third dose given ten minutes after the second. In 90 per cent of all cases it immediately stops the pain.”

Irritable Cough, on Retiring

R Antikamnia and Codeine Tablets.....No. xx

Sig.—Take one and allow it to dissolve slowly, swallowing the saliva

Treatment of Pneumonia

Twenty years ago, and preceding the appearance of La Grippe in its epidemic form, pneumonia proved as dangerous as it does at the present time. Medical men were at a loss, not for a remedy for the disease alone, but even for a logical line of treatment. The celebrated Dujardin-Beaume became so skeptical that he prescribed stimulants, regardless of therapeutical conditions. The mortality in his ward at the Hotel Dieu, in Paris, proved that his patients fared no worse than the others submitted to the antiphlogistic remedies then in vogue.

Codeine was considered the best remedy known possessing a marked and distinct effect upon the hypersecretions of the bronchial mucous membrane. What was desired was an analgesic possessing antipyretic properties, which could be safely used. This has since been found in antikamnia which can be safely exhibited especially on account of its not having a depressing effect on the cardiac system.

Doses of from five to ten grains of antikamnia administered under ordinary conditions do not develop any untoward after-effects. In the treatment of pneumonia, antikamnia is indicated as a necessary adjunct to codeine, on account of its analgesic and antipyretic properties and particularly because it acts as a tonic upon the nerve centers. The tablets of antikamnia and Codeine containing four and three-quarter grains antikamnia and one-fourth grain sulphate of codeine present these two remedies in the most desirable form. One tablet every hour, allowed to dissolve slowly in the mouth is almost a specific for the irritating cough so often met with in these complications. For general medication, it is always best to crush the tablets before administration.

THE GREAT FACT IN MODERN MEDICINE:

"The Blood is the Life,"

*And Where Nature fails to make Good Blood,
WE CAN INTRODUCE IT.*

BOVININE is Bovine Blood Unaltered from the Arteries of the Bullock;
The Universal Auxiliary of Modern Medicine and Surgery,
and the TRUE "ANTITOXIN" of Healthy Nature.

In the more enlightened progress of Modern Medicine, "Blood-letting" has given place to Blood-getting.

Get Good Blood - but How? Not by the Alimentary Process. It has already failed to do its work (else the patient would not be sick); and an acute disease must not even be allowed to do the work it can. Stimulate as you will, the whole sum of the patient's alimentary power when fully forced into play, is unable to keep up the nourishing and supporting contents of the blood. There is absolutely but one thing to do; and, thank God, that can be done, usually with success, as ten-thousand-fold experience has proved. That one thing is this: where Nature fails to PRODUCE good and sufficient Blood, WE CAN INTRODUCE IT from the arteries of the sturdy bullock, by the medium of BOVININE.

The vital activity of this living blood conserve rests on no man's assertion: it speaks for itself, to every properly equipped physician who will test its properties microscopically, physically, or therapeutically.

TRY IT IN PRACTICE.

Try it in Anæmia, measuring the increase of red cells and hæmaglobin in the blood as you proceed, together with the improving strength and functions of your patient.

Try it in Consumption, with the same tests from week to week.

Try it in Dyspepsia or Malnutrition of young or old, and watch the recuperation of the paralysed alimentary powers.

Try it in Intestinal or gastric irritation, inflammation, or ulceration, that inhibits food itself, and witness the nourishing, supporting and healing work done entirely by absorption, without the slightest functional labor or irritation; even in the most delicate and critical conditions, such as Typhoid Fever and other dangerous gastro-intestinal diseases, Cholera Infantum, Marasmus, Diarrhoea, Dysentery, etc.

Try it per rectum, when the stomach is entirely unavailable or inadequate.

Try it by subcutaneous injection, when collapse calls for instantaneous blood supply—so much better than blood-dilution!

Try it on Chronic Ulceration, in connection with your antiseptic and stimulating treatment (which affords no nourishment) and prove the certainty and power of topical blood nutrition, abolishing pus, stench, and PAIN, and healing with magical rapidity and *finality*.

Try it in Chronic Catarrhal Diseases; spraying it on the diseased surfaces, with immediate addition of peroxide of hydrogen; wash off instantly the decomposed exudation, scabs and dead tissue with antiseptic solution (Thiersch's); and then see how the mucous membrane stripped open and clean, will absorb nutrition, vitality and health from intermediate applications of pure bovine.

Try it on the Diphtheritic Membrane itself, by the same process; so keeping the parts clean and unobstructed, washing away the poison, and meanwhile sustaining the strength independently of the impaired alimentary process and of exhaustive stimulants.

Try it on anything, except plethora or unrelieved inflammation; but first take time to regulate the secretions and functions.

Try it on the patient tentatively at first, to see how much and how often, and in what medium, it will prove most acceptable—in water, milk, coffee, wine, grape, lemon or lime juice, broth, etc. A few cases may even have to begin by drops in crushed ice.

A New Hand-book of Hæmotherapy for 1898, epitomizing the clinical experience of the previous three or four years, from the extensive reports of Hospital and private practice. To be obtained of

THE BOVININE COMPANY, 75 W. Houston Street, New York.

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Formula Dr. John P. GRAY.

Neutralizes Acidity of the stomach and checks fermentation.

Promotes appetite, increases assimilation and does not constipate.

Indicated in Phthisis, Bronchitis, Anæmia, Malnutrition, Melancholia, Nervous Prostration, Catarrhal Conditions, General Malaise.

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No. 15 Murray Street, New York.

SYR. HYPOPHOS. CO., FELLOWS

Contains the Essential Elements of the Animal Organization—Potash and Lime;

The Oxidizing Agents—Iron and Manganese;

The Tonics—Quinine and Strychnine;

And the Vitalizing Constituent—Phosphorus; the whole combined in the form of a Syrup with a Slightly Alkaline Reaction.

It Differs in its Effects from all Analogous Preparations; and it possesses the important properties of being pleasant to the taste, easily borne by the stomach, and harmless under prolonged use.

It has Gained a Wide Reputation, particularly in the treatment of Pulmonary Tuberculosis, Chronic Bronchitis, and other affections of the respiratory organs. It has also been employed with much success in various nervous and debilitating diseases.

Its Curative Power is largely attributable to its stimulant, tonic, and nutritive properties, by means of which the energy of the system is recruited.

Its Action is Prompt; it stimulates the appetite and the digestion, it promotes assimilation, and it enters directly into the circulation with the food products.

The prescribed dose produces a feeling of buoyancy, and removes depression and melancholy; hence, the preparation is of great value in the treatment of mental and nervous affections. From the fact, also, that it exerts a double tonic influence, and induces a healthy flow of the secretions, its use is indicated in a wide range of diseases.

Medical Letters may be addressed to:

Mr. FELLOWS, 48 Vesey Street, New York.